

## **Fishery Management Report No. 14-34**

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# **Bottom Trawl Survey of Crab and Groundfish: Kodiak, Chignik, South Peninsula, and Eastern Aleutian Management Districts, 2013**

by

**Kally Spalinger**

**September 2014**

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**Alaska Department of Fish and Game**

**Divisions of Sport Fish and Commercial Fisheries**

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<b>Weights and measures (metric)</b>		<b>General</b>	<b>Mathematics, statistics</b>	
centimeter	cm	Alaska Administrative Code	<i>all standard mathematical signs, symbols and abbreviations</i>	
deciliter	dL	all commonly accepted abbreviations	alternate hypothesis	H <sub>A</sub>
gram	g	e.g., Mr., Mrs., AM, PM, etc.	base of natural logarithm	e
hectare	ha		catch per unit effort	CPUE
kilogram	kg		coefficient of variation	CV
kilometer	km		common test statistics	(F, t, $\chi^2$ , etc.)
liter	L		confidence interval	CI
meter	m		correlation coefficient	R
milliliter	mL	at	correlation coefficient	r
millimeter	mm	compass directions:	(multiple)	
		east	east	
		north	N	
		south	S	
		west	W	
		copyright	©	
		corporate suffixes:		
		Company	degree (angular)	°
		Corporation	degrees of freedom	df
		Incorporated	expected value	E
		Limited	greater than	>
		District of Columbia	greater than or equal to	≥
		et alii (and others)	harvest per unit effort	HPUE
		et cetera (and so forth)	less than	<
		exempli gratia	less than or equal to	≤
		(for example)	logarithm (natural)	ln
		e.g.	logarithm (base 10)	log
		Federal Information Code	logarithm (specify base)	log <sub>2</sub> , etc.
		Code	minute (angular)	'
		id est (that is)	not significant	NS
		latitude or longitude	null hypothesis	H <sub>0</sub>
		monetary symbols	percent	%
		(U.S.)	probability	P
		months (tables and figures): first three letters	probability of a type I error	
		letters	(rejection of the null hypothesis when true)	α
		Jan,...,Dec	probability of a type II error	
			(acceptance of the null hypothesis when false)	β
		®	second (angular)	"
		™	standard deviation	SD
		United States	standard error	SE
		(adjective)	variance	
		U.S.	population	Var
		United States of America (noun)	sample	var
		USA		
		U.S.C.		
		United States Code		
		use two-letter abbreviations (e.g., AK, WA)		
volts	V			
watts	W			

***FISHERY MANAGEMENT REPORT NO. 14-34***

**BOTTOM TRAWL SURVEY OF CRAB AND GROUNDFISH: KODIAK,  
CHIGNIK, SOUTH PENINSULA, AND EASTERN ALEUTIAN  
MANAGEMENT DISTRICTS, 2013**

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## TABLE OF CONTENTS

	<b>Page</b>
LIST OF TABLES.....	ii
LIST OF FIGURES .....	ii
LIST OF APPENDICES .....	iv
ABSTRACT .....	1
INTRODUCTION .....	1
METHODS.....	3
Trawl Description and Procedures.....	3
Catch Sampling Procedures.....	4
Other Projects .....	5
Bitter Crab Sampling .....	5
Tanner and King Crab Abundance Estimation .....	5
RESULTS AND DISCUSSION.....	5
Kodiak .....	5
Tanner Crab .....	6
Red King Crab .....	6
Groundfish .....	7
South Peninsula and Chignik.....	7
Tanner Crab .....	7
Red King Crab .....	8
Groundfish .....	9
Eastern Aleutian .....	9
Tanner Crab .....	9
Red King Crab .....	10
Groundfish .....	10
Prevalence of Bitter Crab Disease .....	10
Weathervane Scallop Sampling .....	10
Skate Sampling .....	10
Water Temperature .....	11
REFERENCES CITED .....	12
TABLES AND FIGURES .....	15
APPENDIX A. EXPLANATION OF TERMS .....	83
APPENDIX B. FISHING LOG AND TRAWL STATIONS FISHED .....	87
APPENDIX C. TRAWL MAPS.....	99
APPENDIX D. TANNER CRAB ABUNDANCE ESTIMATES BY STATION .....	115

## LIST OF TABLES

<b>Table</b>		<b>Page</b>
1. Number of bottom trawl survey hauls used to determine crab abundance, by Tanner crab management district, 1988–2013.....		16
2. Number of male red king and male Tanner crabs caught by management unit, crab cohort, and shell condition in the 2013 large-mesh bottom trawl survey.....		17
3. Tanner crab abundance estimates from bottom trawl surveys in the Kodiak District, 1988–2013. ....		19
4. Tanner crab regulatory harvest strategies abundance threshold levels in number of crab, estimates of number of mature male crab by survey year, and fishery guideline harvest levels from bottom trawl surveys, 2009–2013. ....		24
5. Red king crab abundance estimates from trawl surveys in the Kodiak and Alaska Peninsula areas, 2004–2013. ....		25
6. Dominant species by weight in the Kodiak Tanner crab District bottom trawl survey, 2013. ....		31
7. Tanner crab abundance estimates from bottom trawl surveys in the South Peninsula and Chignik districts, 1988–2013. ....		32
8. Dominant species by weight in the South Peninsula and Chignik Tanner crab districts bottom trawl survey, 2013. ....		42
9. Tanner crab abundance estimates from bottom trawl surveys in the Eastern Aleutian District, 1990–2013.....		43
10. Dominant species by weight in the Eastern Aleutian Tanner crab District bottom trawl survey, 2013. ....		47
11. Bitter crab disease percent prevalence in Tanner crab by station and year from Alitak Bay, Kodiak District, hemolymph samples, 2002–2011. ....		48
12. Tanner crab per station estimated to have bitter crab disease and abundance estimates from stations sampled for bitter crab in Alitak Bay, Kodiak District, 2002–2011.....		49
13. Near-bottom water temperature for warmest and coldest bays during the 2013 bottom trawl survey and the average water temperature in those bays from 2004–2012 surveys. ....		50

## LIST OF FIGURES

<b>Figure</b>		<b>Page</b>
1. Bottom trawl survey stations, 2013.....		51
2. Historic trawl survey areas and current Tanner crab management sections in the Kodiak District. ....		52
3. Tanner crab relative size frequency by sex and district from the 2013 bottom trawl survey. ....		53
4. Tanner crab per kilometer towed in the 2013 Kodiak District bottom trawl survey. ....		54
5. Tanner crab male abundance estimate by carapace width and shell condition from the Northeast, Eastside, and Southeast sections of the 2013 Kodiak District bottom trawl survey.....		55
6. Tanner crab male abundance estimate by carapace width and shell condition from the Southwest, Westside, and North Mainland sections of the 2013 Kodiak District bottom trawl survey.....		56
7. Tanner crab male abundance estimate by carapace width in the Kodiak District bottom trawl surveys, 2004–2013.....		57
8. Tanner crab and red king crab adult female egg clutch fullness by shell condition in the Kodiak District bottom trawl survey, 2013.....		58
9. Red king crab per kilometer towed in the 2013 Kodiak and Alaska Peninsula areas bottom trawl survey.....		59
10. Red king crab male abundance estimate by carapace length in the Kodiak Area bottom trawl surveys, 2004–2013.....		60
11. Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2013 Kodiak Area bottom trawl survey. ....		61
12. Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2013 Kodiak Area bottom trawl survey.....		62
13. Tanner crab per kilometer towed in the 2013 South Peninsula and Chignik districts bottom trawl survey. ....		63

## LIST OF FIGURES (Continued)

<b>Figure</b>		<b>Page</b>
14.	Tanner crab male abundance estimate by carapace width and shell condition from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay in the Western Section of the 2013 South Peninsula District bottom trawl survey.....	64
15.	Tanner crab male abundance estimate by carapace width and shell condition from Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, and Stepovak Bay/West Nagai Strait in the Eastern Section of the 2013 South Peninsula District trawl survey .....	65
16.	Tanner crab male abundance estimate by carapace width in the South Peninsula District bottom trawl surveys, 2004–2013.....	66
17.	Tanner crab male abundance estimate by carapace width and shell condition from Ivanof Bay and Mitrofania in the 2013 Chignik District bottom trawl survey. ....	67
18.	Tanner crab male abundance estimate by carapace width and shell condition from Chignik Bay and Kujulik Bay in the 2013 Chignik District bottom trawl survey.....	68
19.	Tanner crab male abundance estimate by carapace width in the Chignik District bottom trawl surveys, 2004–2013.....	69
20.	Tanner crab adult female egg clutch fullness by shell condition in the South Peninsula, Chignik, and Eastern Aleutian districts bottom trawl survey, 2013.....	70
21.	Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2013 Chignik and South Alaska Peninsula areas bottom trawl survey. ....	71
22.	Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2013 Chignik and South Alaska Peninsula areas bottom trawl survey.....	72
23.	Tanner crab per kilometer towed in the 2013 Eastern Aleutian District bottom trawl survey .....	73
24.	Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2013 Aleutian Islands District bottom trawl survey.....	74
25.	Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2013 Aleutian Islands District bottom trawl survey. ....	75
26.	Weathervane scallop catch in kilograms per kilometer towed from the 2013 bottom trawl survey.....	76
27.	Weathervane scallop shell height frequency from the 2013 bottom trawl survey.....	77
28.	Big, longnose, Bering, Alaska, and Aleutian skate relative size frequency by species from the 2013 bottom trawl survey.....	78
29.	Bering, Aleutian, and Alaska skate catch in kilograms per kilometer towed from the 2013 bottom trawl survey .....	79
30.	Big and longnose skate catch in kilograms per kilometer towed from the 2013 bottom trawl survey.....	80
31.	Near-bottom water temperatures from the 2013 bottom trawl survey.....	81

## LIST OF APPENDICES

<b>Appendix</b>	<b>Page</b>
A1. Explanation of Tanner crab and red king crab terms.....	84
B1. 2013 bottom trawl survey fishing log.....	88
B2. 2013 bottom trawl survey locations, stations, and station areas by district and section.....	95
C1. Izhut, Kazakof, Kizhuyak, and Marmot bays station boundaries with station name, trawl haul number, and location and direction of haul, June 2013.....	100
C2. Chiniak Bay and Chiniak Gully station boundaries with station name, trawl haul number, and location and direction of haul, June 2013.....	101
C3. Ugak Bay, Kiliuda Bay, and Barnabas Gully station boundaries with station name, trawl haul number, and location and direction of haul, June and July 2013.....	102
C4. South Sitkalidak Strait, Twoheaded Island, and Horse's Head area station boundaries with station name, trawl haul number, and location and direction of haul, July 2013.....	103
C5. Alitak Bay and Alitak Flats station boundaries with station name, trawl haul number, and location and direction of haul, July 2013.....	104
C6. Shelikof Strait station boundaries with station name, trawl haul number, and location and direction of haul, September 2013.....	105
C7. Uyak, Uganik, and Viekoda bays station boundaries with station name, trawl haul number, and location and direction of haul, September 2013.....	106
C8. Morzhovoi Bay, Cold Bay, Belkofski Bay, Deer Island, and Sanak Island station boundaries with station name, trawl haul number, and location and direction of haul, August 2013.....	107
C9. Pavlof and Volcano bays station boundaries with station name, trawl haul number, and location and direction of haul, August 2013.....	108
C10. Unga Strait, Beaver Bay, Balboa Bay, and West Nagai Strait station boundaries with station name, trawl haul number, and location and direction of haul, August 2013.....	109
C11. Stepovak, Ivanof, Kuiukta, and Mitrofania bays station boundaries with station name, trawl haul number, and location and direction of haul, August 2013.....	110
C12. Kujulik, Chignik, and Castle bays station boundaries with station name, trawl haul number, and location and direction of haul, August 2013.....	111
C13. Akutan Bay station boundaries with station name, trawl haul number, and location and direction of haul, July 2013.....	112
C14. Unalaska, Kalekta, Makushin, and Pumicestone bays station boundaries with station name, trawl haul number, and location and direction of haul, July 2013.....	113
D1. Tanner crab abundance estimates in the Kodiak District by station and section, 2013.....	116
D2. Tanner crab abundance estimates in the South Peninsula District by station, sampling locale, and section, 2013.....	122
D3. Tanner crab abundance estimates in the Chignik District by station and sampling locale, 2013.....	125
D4. Tanner crab abundance estimates in the Eastern Aleutian District by station and sampling locale, 2013 ..	127

## ABSTRACT

This report summarizes the June through September 2013 bottom trawl survey to assess crab and groundfish resources in the Kodiak, Chignik, South Peninsula, and Eastern Aleutian Tanner crab management districts. Trawl hauls were assessed for species catch composition, abundance estimates of commercially important crabs, and catch per unit effort (CPUE) of commercially important groundfish. For the first time since 2001, the estimated Tanner crab *Chionoecetes bairdi* abundance did not meet regulatory requirements that allow consideration of fishery openings in any of the surveyed districts. Red king crab *Paralithodes camtschaticus* abundance estimates in each of the surveyed management areas also remain too low to consider opening the red king crab commercial fishery. Walleye pollock *Gadus chalcogrammus*, arrowtooth flounder *Atheresthes stomias*, and flathead sole *Hippoglossoides elassodon* dominated the groundfish catch in all of the areas surveyed.

Key words: crab, groundfish, *Chionoecetes bairdi*, *Paralithodes camtschaticus*, trawl survey, Kodiak, South Peninsula, Chignik, Eastern Aleutian, *Gadus macrocephalus*, *Hippoglossoides elassodon*, *Atheresthes stomias*, *Gadus chalcogrammus*.

## INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) conducted a bottom trawl survey during 2013 around Kodiak Island, along the Alaska Peninsula from Cape Douglas to False Pass, and in the Eastern Aleutian Islands from Akutan Island to Unalaska Island (Figure 1). The survey area corresponds to the Kodiak, Chignik, South Peninsula, and Eastern Aleutian districts of the Westward Registration Area for Tanner crab *Chionoecetes bairdi*, defined by 5 AAC 35.505 (a)(b)(c) and (f); the Kodiak and Alaska Peninsula king crab registration areas, and Dutch Harbor District of the Aleutian Islands king crab Registration Area, defined by Alaska Administrative Code 5 AAC 34.400, 5 AAC 34.500, and 5 AAC 34.604 (1); and the Kodiak, Chignik, and South Alaska Peninsula groundfish registration areas, and Aleutian Islands District of the Bering Sea–Aleutian Islands groundfish Registration Area, defined by 5 AAC 28.400, 5 AAC 28.500, 5 AAC 28.550, and 5 AAC 28.605 (a). Tanner crab management units are districts; king crab and groundfish management units are areas. This report summarizes survey data by district or area depending on species.

ADF&G began bottom trawl surveys around Kodiak Island in 1963. Early surveys focused on red king crab *Paralithodes camtschaticus* in the Kodiak Area and targeted Long Island Bank (Reynolds and Powell 1964), Marmot Flats (McMullen 1967a), Portlock Bank (McMullen 1967b), Albatross Bank (McMullen 1968), and Alitak and Kaguyak bays (Kingsbury and James 1971; Figure 2). Trawl surveys to assess Tanner crab in the Kodiak District were initiated in 1980 in North Shelikof Strait (Colgate and Hicks 1982) and expanded to other areas of the Kodiak and Chignik districts in 1981 (Colgate and Hicks 1983), and to Pavlof Bay in the South Peninsula District in 1984 (Colgate 1984). The first comprehensive trawl survey of the Kodiak District was conducted in 1987 (Jackson 1990) and in 1988 became the standard Tanner crab stock assessment tool in the Kodiak, Chignik, and South Peninsula districts (Urban and Vining 1999). The Eastern Aleutian District bottom trawl survey was added to the regionwide survey program in 1990 and generally continued on a triennial basis until 2003. Beginning in 2004, selected locations of the Eastern Aleutian District have been annually surveyed to support Tanner crab fishery management.

From 1973 to 1986, Tanner crab were surveyed as an adjunct to ADF&G's king crab pot surveys (Colgate and Hicks 1983). The final transition to a trawl survey in 1988 occurred for multiple reasons:

1. Trawl gear is assumed to be less selective in capturing crabs than pot gear and is therefore a better tool to assess abundance and predict future recruitment. Catchability of crabs by pots varies depending on size, sex, and bait characteristics (Colgate and Hicks 1982).
2. Trawl survey catch per unit effort (CPUE) is a direct measure of crab and fish density, which allows for consistent spatial and temporal expansion estimates across a fixed grid of survey stations. The catch of undersized adult male and female crab by pots does not appear to be proportionate to their abundance in the population and suggests that crab behavior affects pot survey CPUE (Colgate 1984).
3. Trawling is less time intensive (Urban 1993), allowing a single trawl vessel to survey the same area in one season that previously was surveyed by multiple pot survey vessels; this provides substantial cost savings.
4. Trawl surveys allow for collection of information such as species composition and size frequencies of commercially and ecologically important species not commonly encountered in pots. National Marine Fisheries Service (NMFS) currently incorporates walleye pollock *Gadus chalcogrammus* abundance estimates and biological information collected from the ADF&G trawl survey into their Stock Assessment and Fishery Evaluation report. NMFS is also developing methods to incorporate ADF&G trawl survey data from Pacific cod *Gadus macrocephalus* and northern and southern rock sole *Lepidopsetta polyxystyra* and *L. bilineata* into the Stock Assessment and Fishery Evaluation reports for those species.

Since 1988, between 287 and 423 successful trawl hauls have been completed annually during the bottom trawl survey (Table 1). In 1999, ADF&G developed Tanner crab harvest strategies for the above districts that set minimum abundance thresholds for opening commercial fishing and brought Tanner crab management into compliance with Alaska Board of Fisheries regulation on harvest strategies (5 AAC 35.080; Urban et al. 1999). The abundance threshold that must be met before considering opening a district to fishing was defined as half the long-term average abundance of mature males (carapace width  $\geq 115$  mm; Urban and Vining 1999). Tanner crab guideline harvest levels (GHLs) are primarily determined by estimating the number of molting mature (Appendix A1) male crab in a district or section and applying a harvest rate based on composition of the male population. Additional precautionary measures are contained within the harvest strategies to ensure conservative management when stocks are rebuilding (Urban and Vining 1999). Tanner crab fisheries were closed due to low abundance in the Kodiak District from 1994 to 2000; the South Peninsula District from 1990 to 2000 and from 2002 to 2004; and the Chignik District from 1990 to 2004, 2007 to 2009, and 2012 to 2013.

The primary objectives of the 2013 crab and groundfish bottom trawl survey were to estimate the abundance and condition of Tanner and red king crabs, and determine species composition, length frequency distributions, and CPUE (kg/km towed) of commercially important groundfish.

As part of the standard assessment survey the following additional data were collected (Spalinger and Cavin 2004):

1. shell height of weathervane scallops *Patinopecten caurinus*;
2. skate (*Raja spp.* and *Bathyraja spp.*) species, sex, and size;
3. chela (claw) height of male Tanner crab in Marmot Bay; and

#### 4. walleye pollock size, sex, and otoliths (ear bones).

Special projects in 2013 (Spalinger 2013b) included collection of 1) chela height of male Tanner crab in the Northeast, Eastside, and Westside sections of the Kodiak District; 2) whole adult female Tanner crab from the Northeast, Eastside, and Westside sections of the Kodiak District; and 3) whole stomachs from walleye pollock, Pacific cod, arrowtooth flounder *Atheresthes stomias*, Pacific halibut *Hippoglossus stenolepis*, flathead sole *Hippoglossoides elassodon*, northern rock sole, and spiny dogfish *Squalus acanthias* in Marmot Bay of the Kodiak District.

This report includes recent information on bitter crab disease prevalence in Tanner crab from Alitak Bay. Bitter crab disease is caused by a parasitic dinoflagellate *Hematodinium* sp. that infects blood and causes a bitter, aspirin-like flavor in cooked crab. It is fatal to crab and can affect recruitment and population size if prevalence is high.

Tanner crab chela height data and female Tanner crab collection are ongoing ADF&G research projects; results are not presented in this report. Walleye pollock otoliths and groundfish stomachs were collected at the request of NMFS, and these data can be obtained by contacting the Resource Ecology and Fisheries Management Division of NMFS at the Alaska Fisheries Science Center in Seattle, WA.

## METHODS

### TRAWL DESCRIPTION AND PROCEDURES

Since 1988, ADF&G has surveyed areas of historic Tanner crab abundance utilizing the research vessel *Resolution* (27.4 m). In 2013 one successful bottom trawl haul was made in each of 369 stations. In seven of the offshore stations in the Kodiak District, one to three extra hauls were made to evaluate the accuracy of Tanner crab estimation methods in large survey stations (Spalinger 2013b).

The bottom trawl survey net is a 400-mesh eastern otter trawl designed to sweep a 12.2 m path. The net was constructed with 10.2 cm stretch mesh at the mouth, 8.9 cm stretch mesh in the body, and a 3.2 cm stretch mesh liner in the codend. The net has a 21.3 m headrope with 18 floats 20.3 cm in diameter. The footrope is 29.0 m long, weighted with a 1.0 cm diameter chain attached every 25.4 cm to ensure the footrope tends bottom, and it does not have roller gear or a tickler chain. The dandylines are 45.7 m long, each consisting of an 18.3 m section of 1.5 cm cable and a pair of 27.4 m sections of 1.3 cm cable, one attached to the top and the other to the bottom of each net wing (Spalinger and Cavin 2004). Astoria "V" type doors weighing 340 kg and measuring 1.5 m x 2.1 m are used to spread the net.

The survey area is divided into nearshore stations averaging approximately 21.0 km<sup>2</sup> and offshore stations averaging approximately 74.6 km<sup>2</sup>. Considerable size variation of stations occurs due to coastline topography and bathymetry. The area (km<sup>2</sup>) classified as crab habitat is generally calculated using depths greater than 20 fathoms (Spalinger and Cavin 2004). Station design has been generally consistent since 1988.

Within each station, the net was towed on bottom at an average speed of 5.3 km per hour for 1.85 km (1 nmi). The haul length of 1.85 km is intended to capture a sample small enough for the vessel equipment to weigh, yet large enough to provide a representative sample of fishery resources. Irregular bottom type, net hang-ups, or exceptionally large catches occasionally caused haul length to differ from 1.85 km. Haul length was determined by Global Positioning

System. The vessel captain estimated corrections in distance for hauls that were not straight. Haul location was limited to locations of trawlable substrate as determined from nautical charts and bottom mapping systems on the vessel. All hauls were made during daylight hours. Haul location, distance, time, and depth were recorded on ADF&G skipper trawl record forms. Quality of net performance was rated and a haul was repeated when the skipper and crew leader determined the net did not adequately sample the bottom (Spalinger and Cavin 2004). A temperature-depth data logger was attached to the headrope, recording water temperature and depth approximately 2 m above the sea floor for each haul.

## CATCH SAMPLING PROCEDURES

Total catch weight from each haul was determined by weighing the full trawl codend with an electronic crane scale accurate to  $\pm 1.0$  kg, then emptying the codend, weighing the empty codend, and subtracting the weight of the empty codend from the full trawl codend weight. A 1.5 m<sup>2</sup> splitting net was tied into the on-deck sorting bin before the trawl catch was dumped from the codend. After emptying the entire catch from the codend into the sorting bin, selected species were weighed ( $\pm 0.1$  kg), counted, and measured ( $\pm 1.0$  cm) when applicable (whole-haul sampled). The following species were whole-haul sampled: sablefish *Anoplopoma fimbria*, Pacific cod, walleye pollock, Pacific halibut, all rockfish *Sebastodes* spp. and *Sebastolobus* spp., lingcod *Ophiodon elongatus*, Atka mackerel *Pleurogrammus monopterygius*, giant Pacific octopus *Octopus dofleini*, squid *Berryteuthis magister*, Pacific herring *Clupea harengus*, salmon *Onchorhynchus* spp., weathervane scallop, red sea cucumber *Parastichopus californicus*, Bering skate *Bathyraja interrupta*, Aleutian skate *B. aleutica*, Alaska skate *B. parmifera*, longnose skate *Raja rhina*, big skate *R. binoculata*, Dungeness crab *Cancer magister*, Tanner crab, red king crab, snow crab *Chionoecetes opilio*, hair crab *Erimacrus isenbeckii*, box crab *Lopholithodes foraminatus*, spiny dogfish, Pacific sleeper shark *Somniosus pacificus*, salmon shark *Lamna ditropis*, wolf-eel *Anarrichthys ocellatus*, and giant wrymouth *Cryptacanthodes giganteus*. After whole-haul species were sampled, the splitting net was lifted through the remaining on-deck catch and the subsample was craned to the sorting table for catch composition sampling.

Length or width measurements were taken from selected commercial finfish and shellfish species. Fish measurements were entered directly into an onboard database to allow for data collection efficiency and quality control. Finfish and sharks were measured from snout to fork or midpoint of the caudal fin. Skates were measured from snout to posterior notch on the wing. Tanner crab carapace width (CW) was measured between the lateral margin spines, perpendicular to the midline. Red king crab were measured for carapace length (CL) from the right eye socket to the medial posterior edge of the carapace. Because legal size measurement of Tanner and king crabs is the carapace width including the lateral margin spines, each crab of questionable legal status was measured including the spines to determine if it was a legal-size crab. An explanation of the terms used to characterize Tanner and king crabs is presented in Appendix A. Dungeness crab were measured for CW and checked for legal status across the carapace immediately anterior to the tenth anterolateral spine.

Tanner, king, and Dungeness crabs were subsampled when each species/sex exceeded 200 individuals per haul. Chela height measurements (the greatest height, excluding spines, on the right chela) from up to 50 Tanner crab per haul were taken from male crab > 60 mm CW in the Northeast, Eastside, and Westside sections of the Kodiak District. Clutch fullness of mature female Tanner, king, and Dungeness crabs was measured by examining each egg clutch and

estimating the fractional clutch size for the size of the abdomen (Spalinger 2006) and embryo development was noted by the presence or absence of eyed eggs. External signs of disease were also recorded for all measured crab. When available, a minimum of 20 weathervane scallops from each haul were measured for shell height following the methods detailed in Spalinger and Cavin (2004).

## OTHER PROJECTS

### Bitter Crab Sampling

In Alitak Bay on the south end of Kodiak Island, where bitter crab disease prevalence is high compared to other survey areas, hemolymph smears from 30 randomly selected Tanner crab per station were prepared each year through 2012 (Pearson and Meyers 1992). This project was discontinued in 2013; however, results not previously reported are presented in this report. Smears were stained with Diff-Quik™ stain<sup>1</sup> and 30 fields of view were examined on a microscope under 100 magnification for each slide. Slides were rated negative or positive on a scale of 1 to 5. Disease prevalence is defined as the proportion of crab with bitter crab disease from the total abundance estimate of that area during the survey period. Percent prevalence of bitter crab in the sample area and in the population of Alitak Bay Tanner crab was calculated from the results of the hemolymph smears. In addition to collecting hemolymph smears, a hemolymph sample was taken and preserved in ethanol for future genetic analysis of the bitter crab pathogen.

## TANNER AND KING CRAB ABUNDANCE ESTIMATION

Abundance estimates for Tanner and king crabs were derived from trawl survey data using the “area swept” technique (Alverson and Pereyra 1969). Assuming a 12.2 m path, the area swept by the trawl in a 1 km tow is  $\frac{1}{82} \text{ km}^2$ . Hence, catch of each species in a haul can be converted to a density estimate (number of animals per  $\text{km}^2$ ) by multiplying the number of animals caught per km by 82. Density estimates were multiplied by the station area to estimate abundance in the station. The sum of estimates from stations in a geographic area provide an abundance estimate for the area.

Catches for all other species were standardized to kg per km towed.

## RESULTS AND DISCUSSION

Detailed data for each haul and station are in Appendix B1 and include start position, distance towed, average depth, date, and bottom temperature.

## KODIAK

In the Northeast, Eastside, Southeast, and Southwest sections of the Kodiak Tanner crab district, 149 hauls were completed between June 13 and July 13 as part of the standard survey and an additional 15 hauls were performed in 7 offshore stations to determine station catch variability (haul numbers 1-164). Results from the additional 15 hauls are not included in this report because they were not used to determine crab abundance (Spalinger 2013b; Spalinger and Cavin 2004). In the Westside and North Mainland sections, 59 hauls were completed between September 4 and September 12, although one haul was unsuccessful because strong currents

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<sup>1</sup> Product names are used for completeness but do not constitute endorsement.

caused trawl doors to cross and prevented the net from fishing properly (haul numbers 329-387). The total area used to determine abundance estimates for the Kodiak District was 8,305.2 km<sup>2</sup> (Appendix B2). Haul locations are shown in Appendices C1–C7.

### Tanner Crab

The 2013 survey captured 79,906 male Tanner crab in Kodiak District with a mean size of 48.9 mm CW and 74,771 female Tanner crab with a mean size of 44.0 mm CW. Two dominant size classes were observed in both male and female populations. Modes were located at approximately 30 mm CW and 40 mm CW (Figure 3). Tanner crab were captured in 98% of all hauls, with catches ranging from 0 to 11,266 crab per haul. The highest Tanner crab CPUE, 7,160 crab per km towed (Figure 4), was found in the Eastside Section in Ugak Bay, station UGI. Soft/new pliable shell and new-shell crab made up 96% (76,594) of the total male Tanner crab captured in the Kodiak District survey (Table 2). The majority of those new-shell crab were between 25 and 50 mm CW; however, that size was not well represented in the Westside and North Mainland sections (Figures 5 and 6).

Tanner crab abundance estimates were derived for each station and then summed by each surveyed management section described in ADF&G commercial shellfish regulations (Appendix D1). The total Kodiak District 2013 surveyed Tanner crab abundance was estimated at 200.3 million crab, an increase from 44.6 million crab in 2012 (Table 3), and was the highest abundance estimate in the trawl survey history. The largest increases were observed among prerecruit males < 70 mm CW and juvenile females. Decreases in abundance from 2012 were seen in the larger size classes of males: undersized males > 114 mm, recruit, and postrecruit males. The Eastside Section had the largest estimated abundance of legal males, while the Westside and Northeast sections had the smallest estimated abundances of legal males (Table 3).

The 2013 estimated abundance of legal-sized male Tanner crab in the Kodiak District was 1.8 million crab, which was 3.2 million less than the 2012 estimate of 5.0 million and the lowest abundance estimate of legal-size males since 1998 (Table 3; Figure 7). In 2013, the abundance estimate of 0.7 million legal-size male crab in the Eastside Section was the largest in the Kodiak District. Based on the Tanner crab management plan (5 AAC 35.507), the Eastside and Southeast sections were above the mature male abundance thresholds but did not satisfy the minimum GHL criteria, while the Northeast, Southwest, Westside, and North Mainland sections were below the thresholds required to open a commercial Tanner crab fishery (Table 4). Therefore, the Kodiak District did not open to commercial Tanner crab fishing in 2014. The 2013 estimate of legal males decreased compared to 2012 in all surveyed sections of the Kodiak District.

Egg clutches of 1,981 mature female Tanner crab from the Kodiak District were examined; 56.7% were primiparous, an increase from 10.9% in 2012 (Spalinger 2013a). Mature female egg clutches were more than half full in 41.2% of samples (Figure 8). This was lower than 2012 when 72.0% of mature females sampled had egg clutches that were more than half full (Spalinger 2013a).

### Red King Crab

Red king crab were captured in 9.6% of Kodiak Area hauls totaling 208 males and 279 females. King crab catch ranged from 0 to 349 crab per haul, with 96.3% of king crab caught inside Alitak Bay (Figure 9). Mean king crab size was 129.7 mm CL for males and 117.1 mm CL for females. The majority of female king crab were adults, while the majority of males were juvenile. Forty-

four adult female king crab captured and examined in the 2013 Kodiak Area survey, or 63.8% of all adult females examined, had an egg clutch that was more than half full (Figure 8), similar to 63.4% of adult female king crab with an egg clutch more than half full in 2012 (Spalinger 2013a).

Kodiak red king crab abundance remains low despite a commercial fishing closure since 1983. Red king crab abundance estimates were derived for four districts of the Kodiak Registration Area by size and sex categories (Table 5). The 2013 Kodiak red king crab abundance was estimated at 280,497 crab, up from an estimated 201,756 crab in 2012. The largest increases from 2012 were observed among adult females and prerecruit males > 130 mm CL (Table 5, Figure 10). The total estimated number of legal males increased from 17,135 crab in 2012 to 21,050 crab in 2013. Prerecruit males I and II represented 66% of the total male abundance. Relatively few king crab are captured by the trawl survey each year (208 males in 2013 and 252 males in 2012; Spalinger 2013a). High annual sampling variability and fluctuating abundance estimates within districts are a result of uneven crab distribution.

## **Groundfish**

The CPUE of all species from sample hauls in the Kodiak groundfish area was 490 kg/km towed. During the 2013 survey, walleye pollock was the dominant species caught by weight (25.1%), followed by flathead sole (18.8%), arrowtooth flounder (14.0%), Pacific cod (6.1%), and Tanner crab (5.0%; Table 6). Although the Tanner crab abundance estimate was the highest in trawl survey history, it dropped from being the fourth highest species caught by weight to fifth, while the proportion of Pacific cod increased. The proportion of arrowtooth flounder caught by weight also continued to decline from first highest in 2011 to second in 2012 and third in 2013 (Spalinger 2012, 2013a).

During the 2013 Kodiak Area bottom trawl survey, 22,216 fish representing 34 species were measured for length. Arrowtooth flounder and flathead sole were found in almost every haul, although flathead sole were most abundant near shore (Figure 11). Yellowfin sole *Pleuronectes asper* were primarily found inside bays, with greater numbers along the north end of Kodiak Island. Rock sole in the Kodiak Area were mainly northern rock sole except in Kupreanof Strait and outer Marmot Bay where southern rock sole were more abundant (Figure 11). Sablefish were caught in small numbers around Kodiak Island (Figure 12). Pacific cod and walleye pollock were common throughout the survey with high densities along the east side of Kodiak Island. Rougheye rockfish *Sebastodes aleutianus* were also encountered around Kodiak Island, with the largest concentrations in Marmot Bay and Barnabas Gully (Figure 12).

## **SOUTH PENINSULA AND CHIGNIK**

In the South Peninsula and Chignik Tanner crab districts, 138 hauls were completed from July 27 through August 26: 93 hauls in the South Peninsula District (haul numbers 208-285 and 312-326; Appendices C8-C11) and 45 hauls in the Chignik District (haul numbers 165-207 and 327-328; Appendices C11-C12). The total area used to determine abundance estimates was 3,163.6 km<sup>2</sup> in the South Peninsula District and 1,408.4 km<sup>2</sup> in the Chignik District (Appendix B2).

### **Tanner Crab**

The 2013 trawl survey of the South Peninsula District caught 34,711 Tanner crab. The number per haul ranged from 0 to 1,849 Tanner crab, with the highest CPUE of 998 crab per km towed in the Eastern Section, in Pavlof Bay, station VOD (Figure 13). The mean CW of Tanner crab in

the South Peninsula District was 51.3 mm for males and 45.0 mm for females. The dominant male and female size class modes were both approximately 30 mm CW (Figure 3). Male crab < 92 mm CW accounted for 91.7% (17,387) of the total male Tanner crab captured in the South Peninsula District survey (Table 2; Figures 14 and 15).

Abundance estimates were derived for each size and sex category of Tanner crab by surveyed locale (Appendix D2). Tanner crab abundance in the surveyed portion of the South Peninsula District was estimated at 42.2 million crab (Table 7), an increase from 12.3 million crab in 2012. The 2013 increase in the Tanner crab abundance was primarily due to large numbers of juvenile females and undersized males < 70 mm CW (Figure 16). Abundance estimates of legal-size male Tanner crab from the 2013 survey decreased to 1.0 million legal crab from 4.2 million in 2012, the lowest since 2006. Tanner crab abundance estimates from the 2013 survey did not meet the regulatory requirements to open the commercial fisheries in the Eastern or the Western sections of the South Peninsula District in 2014 (5 AAC 35.507; Table 4).

The 2013 Chignik District bottom trawl survey captured 25,246 Tanner crab with catches ranging from 7 to 2,396 Tanner crab per haul. Castle Bay showed the highest CPUE of Tanner crab at 1,617 crab per km towed from station 4270 (Figure 13). The mean Tanner crab CW in the Chignik District was 59.8 mm for males and 39.5 mm for females. There were 2 dominant male and female size classes with modes at approximately 25 mm CW and 35 mm CW (Figure 3). Mature male ( $\geq$  115 mm CW) Tanner crab catch was almost exclusively old-shell and very old-shell crab (97.4%). Juvenile males with soft/new pliable or new-shell conditions accounted for 93.6% of the total male Tanner crab captured in the Chignik survey, compared to 60.7% in 2012 (Spalinger 2013a). Most of the juvenile male crab captured were found in Chignik and Ivanof Bays (Table 2; Figures 17 and 18).

Abundance estimates were derived for each size and sex category of Tanner crab by surveyed locale (Appendix D3). The 2013 Chignik District Tanner crab abundance was estimated at 30.7 million crab, an increase from 5.7 million crab in 2012 and the second-highest estimate in survey record (Table 7). Juvenile females and males < 70 mm CW showed the largest increase from the prior year (Figure 19). The estimated abundance of legal-size male Tanner crab in 2013 decreased by approximately 20,000 crab from 2012 and was the fifth highest on record at 0.8 million crab. Abundance estimates from the 2013 survey met the regulatory requirements for number of mature males but did not meet minimum guideline harvest level requirements of 200,000 pounds for commercial Tanner crab fishing in the Chignik District in 2014 (Table 4).

The estimated number of adult female Tanner crab in 2013 decreased to approximately 38% of the 2012 estimate in the South Peninsula District and to approximately 73% of the 2012 estimate in the Chignik District (Table 7). Egg clutches that were more than half full were found in 48.8% of the 539 adult female Tanner crab examined in the South Peninsula District and in 44.0% of the 209 adult females in the Chignik District (Figure 20). Multiparous females in the South Peninsula District accounted for 86.6% of adult female Tanner crab examined in 2013 compared to 82.5% in 2012 (Spalinger 2013a). In Chignik District during 2013, 90.4% of adult females examined were multiparous, slightly lower than 96.0% multiparous in 2012 (Spalinger 2013a).

## **Red King Crab**

The Alaska Peninsula king crab management area is essentially the same size as the South Peninsula and Chignik Tanner crab management districts combined. Red king crab abundance in the Alaska Peninsula Area remains at low levels. The 2013 abundance estimate increased from

78,365 crab in 2012 to 331,723 crab in 2013 (Table 5). A total of 203 male and 93 female red king crab were captured in the Alaska Peninsula Area, 78.7% of which were caught from one haul in Volcano Bay (Figure 9). The patchy distribution of king crab in the sampling areas contributes to high sampling variability and abundance estimates that may not necessarily reflect an increasing or decreasing population. Male king crab mean carapace length was 131.6 mm, and female red king crab mean carapace length was 113.4 mm. Less than half (48.4%) of female king crab examined were mature with egg clutches.

## **Groundfish**

The CPUE of all species from sample hauls in the Chignik Groundfish Registration Area and the Eastern District of the South Alaska Peninsula Groundfish Registration Area was 487 kg/km towed. Flathead sole (27.8%), walleye pollock (19.5%), and arrowtooth flounder (12.7%) were the dominant species by weight captured in the survey (Table 8). These species were also dominant in recent surveys (Spalinger 2009, 2010, 2011, 2012, 2013a).

Length measurements were taken from 14,142 fish representing 29 groundfish species in the Eastern District of the South Alaska Peninsula Area and the Chignik Area. Arrowtooth flounder and flathead sole were found areawide with one exception: arrowtooth flounder were absent from Cold Bay (Figure 21). Northern rock sole were mainly found west of Kupreanof Point, as were the highest concentrations of yellowfin sole (Figure 21). Sablefish were only found in Kuiukta Bay (Figure 22). Rougheye rockfish were more abundant east of Kupreanof Point and around Sanak Island, whereas walleye pollock and Pacific cod were abundant throughout the survey area (Figure 22).

## **EASTERN ALEUTIAN**

In the Eastern Aleutian Tanner Crab District, 23 hauls (haul numbers 286-308) were completed from August 16 to 20 (Appendices C13–C14). The total area used to determine abundance estimates was 481.2 km<sup>2</sup> (Appendix B2).

### **Tanner Crab**

The 2013 Eastern Aleutian District survey captured 2,868 male and 4,180 female Tanner crab. Tanner crab catch ranged from 2 to 1,160 animals per haul, with the highest CPUE of 696 crab per km towed in Unalaska Bay at station UNE (Figure 23). Mean carapace width was 79.1 mm for males and 69.5 mm for females. Male Tanner crab in the Eastern Aleutian District were mostly between 45 mm CW and 75 mm CW or over 100 mm CW. Females were mostly between 45 mm CW and 100 mm CW (Figure 3). Of the 761 mature female Tanner crab sampled, 64.3% had an egg clutch greater than half full (Figure 20).

Abundance estimates were derived for each size and sex category of Tanner crab by surveyed locale (Appendix D4). The Tanner crab abundance estimate in the Eastern Aleutian District in 2013 was 6.4 million crab, an increase from 4.2 million crab in 2012 (Table 9). The 2013 legal-size male Tanner crab abundance was estimated to be 96,385 crab, a decline from 300,250 legal-size males in 2012, with Makushin Bay having the largest abundance of legal-size male crab. Based on the Tanner crab harvest strategy (5 AAC 35.509), the Unalaska/Kalekta Bay and Makushin/Skan Bay Sections were above the mature male abundance thresholds but did not satisfy the minimum GHL criteria, and the Akutan Section was below the threshold required to open a commercial Tanner crab fishery (Table 4). Therefore, the 2014 Eastern Aleutian District Tanner crab fishery did not open to commercial fishing.

## **Red King Crab**

The red king crab abundance in the surveyed area around Akutan and Unalaska islands remains at historic low levels, and the fishery has been closed since the 1982/83 season. A total of 4 male and 2 female red king crab were captured during the 2013 trawl survey.

## **Groundfish**

The 2013 trawl survey stations in the Eastern Aleutian Tanner Crab Registration District are within the Aleutian Islands District of the Bering Sea–Aleutian Islands Groundfish Registration Area. The CPUE of all species from sample hauls in that area was 323 kg per km towed. Arrowtooth flounder was the dominant species by weight (27.6%), followed by flathead sole (19.2%) and walleye pollock (17.6 %; Table 10).

Length measurements were taken from 2,663 fish representing 22 species during the 2013 eastern Aleutian survey. Arrowtooth flounder, flathead sole, Pacific cod, and walleye pollock were common around Unalaska and Akutan islands (Figures 24 and 25). Most of the rock sole were southern rock sole, although only northern rock sole were found in Akutan Bay (Figure 24). Yellowfin sole were not observed in Unalaska Bay (Figure 24). The only sablefish found around the surveyed Aleutian Islands were in Pumicestone Bay, whereas rougheye rockfish were found around Unalaska Island but were absent from Pumicestone and Akutan bays (Figure 25).

## **PREVALENCE OF BITTER CRAB DISEASE**

Bitter crab disease sampling was discontinued in 2013, but unpublished results from prior years are presented here. Hemolymph smears from Alitak Bay were collected from 461 Tanner crab at 16 stations during the 2012 Kodiak District survey. Samples from 2012 are in process and results are not available at the time of publication. Bitter crab disease prevalence rate, or the percentage of crab with the disease during the survey, was 1.1% in 2011, up from the 2010 rate of 0.3% (Table 11) and the second lowest on record for Alitak Bay. Annual prevalence rates decreased from 2006 through 2010, then increased slightly in 2011, with rates ranging from 0.3% to 8.6% from the last 10 years that data is available. The population of infected crab in sampled stations was estimated to be 14,145 crab in 2011, an increase from 7,325 infected crab in 2010, but still much less than the estimated 1.5 million infected crab in 2007 (Table 12).

## **WEATHERVANE SCALLOP SAMPLING**

Weathervane scallop shell height measurements were collected during the 2013 survey for the 14th consecutive year. Ninety-one percent of all weathervane scallops caught were located in the Kodiak Area (Figure 26). The 1,666 sampled scallops averaged 144.3 mm in height, a decrease from 149.5 mm in 2012 (Figure 27).

## **SKATE SAMPLING**

Skate species and sex were determined for each skate caught during the 2013 trawl survey. A total of 2,139 skates were captured and measured. Bering skates accounted for 48.2% of the total number of skates caught and averaged 30.0 cm from snout to wing notch (Figure 28). Longnose skates made up 21.4% of the total number of skates caught and averaged 53.1 cm in length. Aleutian skates composed 12.1% of the number of skates caught and had an average length of 58.3 cm. Big skates accounted for 11.3% of all skates caught and averaged 62.2 cm, and Alaska skates made up 7.0% and averaged 44.4 cm (Figure 28). The larger skate species, big and

Aleutian skates, were greater than 65% female. The smaller species (longnose, Bering, and Alaska skates) were composed of 51.2%, 47.0%, and 44.0% females respectively. Although Bering skates were the most abundant skate species encountered during the survey, they accounted for only 15.5% of the total skate catch by weight. The less abundant big skate accounted for 28.9% of the total skate catch by weight.

Skates were captured throughout the survey area, although species abundance varied by area. Bering skates were most abundant around Kodiak Island. Aleutian skates were mostly found east of Pavlof Bay and Alaska skates were found more often off the southeast coast of Kodiak Island and in Morzhovoi and Makushin bays (Figure 29). Most longnose skates were captured east of Kupreanof Point. Big skates were typically most abundant in survey stations closer to shore (Figure 30).

## **WATER TEMPERATURE**

Near-bottom water temperature was recorded during each haul throughout the survey using a temperature and depth data-logger attached to the headrope, recording water temperature and depth approximately 2 m above the sea floor. The coolest near-bottom temperatures were found in Deadman and Kazakof bays in the Kodiak District. The warmest temperatures were found in Cold Bay (South Peninsula District) and Kalekta Bay (Eastern Aleutian District; Figure 31). Survey-wide, near-bottom temperatures ranged from 2.56°C to 9.54°C, with an average of 5.56°C. This was similar to the average near-bottom temperatures recorded in the past two years of the survey (Table 13).

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## **TABLES AND FIGURES**

Table 1.—Number of bottom trawl survey hauls used to determine crab abundance, by Tanner crab management district, 1988–2013.

Year	Kodiak	Chignik	South Peninsula	Eastern Aleutian	Total
1988	217	0	108	0	325
1989	221	35	132	0	388
1990	217	37	123	46	423
1991	228	33	117	41	419
1992	209	29	114	0	352
1993	231	35	111	0	377
1994	200	34	122	44	400
1995	218	31	0	38	287
1996	223	27	122	0	372
1997	218	34	116	0	368
1998	219	35	93	0	347
1999	231	36	93	39	399
2000	221	37	94	35	387
2001	222	36	94	0	352
2002	226	47	95	0	368
2003	211	45	93	39	388
2004	226	45	94	24	389
2005	230	46	92	23	391
2006	216	46	90	28	380
2007	211	45	92	23	371
2008	215	44	89	23	371
2009	215	46	93	28	382
2010	213	45	90	23	371
2011	207	46	91	23	367
2012	209	46	91	28	374
2013	208	45	93	23	369

*Note:* All hauls occurring in Chignik and South Peninsula Tanner crab districts are within the Alaska Peninsula king crab area.

Table 2.—Number of male red king and male Tanner crabs caught by management unit, crab cohort, and shell condition in the 2013 large-mesh bottom trawl survey.

Cohort	Definition	SHELL CONDITION				Total
		Soft / New pliable	New	Old	Very old/ Very very old	
<b>Kodiak Area red king crab</b>						
Prerecruit IV	< 95 mm CL	0	11	0	0	11
Prerecruit III	95 - 112 mm CL	0	25	0	0	25
Prerecruit II	113 - 130 mm CL	0	87	0	0	87
Prerecruit I	> 130 mm CL and undersized	0	59	0	0	59
Recruit	< 164 mm CL and legal soft/new	0	17			17
Postrecruit	≥ 164 mm CL or legal and not soft/new	0	6	4	3	13
Total		0	205	4	3	212
<b>Alaska Peninsula Area red king crab</b>						
Prerecruit IV	< 79 mm CL	0	8	0	0	8
Prerecruit III	79 - 95 mm CL	0	3	1	0	4
Prerecruit II	96 - 115 mm CL	0	26	5	0	31
Prerecruit I	> 115 mm CL and sublegal	0	57	3	0	60
Recruit	< 152 mm CL and legal soft/new	0	33			33
Postrecruit	≥ 152 mm CL or legal and not soft/new	0	39	13	3	55
Total		0	166	22	3	191
<b>Kodiak District Tanner crab</b>						
Prerecruit IV	< 70 mm CW	9,788	58,134	207	40	68,169
Prerecruit III	70 - 91 mm CW	527	5,388	70	6	5,991
Prerecruit II	92 - 114 mm CW	150	1,748	136	149	2,183
Prerecruit I	≥ 115 mm CW and sublegal	19	467	313	1,240	2,039
Recruit	< 165 mm CW and legal soft/new	2	306			308
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	65	427	724	1,216
Total		10,486	66,108	1,153	2,159	79,906
Mature only	≥ 115 mm CW	21	838	740	1,964	3,563
<b>Chignik District Tanner crab</b>						
Prerecruit IV	< 70 mm CW	1,725	11,497	0	6	13,228
Prerecruit III	70 - 91 mm CW	5	332	4	5	346
Prerecruit II	92 - 114 mm CW	1	37	6	24	68
Prerecruit I	≥ 115 mm CW and sublegal	0	9	48	425	482
Recruit	< 165 mm CW and legal soft/new	0	7			7
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	8	36	378	422
Total		1,731	11,890	94	838	14,553
Mature only	≥ 115 mm CW	0	24	84	803	911

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Table 2.–Page 2 of 2.

Cohort	Definition	SHELL CONDITION				Total
		Soft/ New pliable	New	Old	Very old/ Very very old	
<b>South Peninsula District Tanner crab</b>						
Prerecruit IV	< 70 mm CW	2,198	13,847	2	0	16,047
Prerecruit III	70 - 91 mm CW	87	1,246	6	1	1,340
Prerecruit II	92 - 114 mm CW	3	198	15	24	240
Prerecruit I	≥ 115 mm CW and sublegal	1	152	28	332	513
Recruit	< 165 mm CW and legal soft/new	0	148			148
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	4	19	640	663
Total		2,289	15,595	70	997	18,951
Mature only	≥ 115 mm CW		1	304	47	972
<b>Eastern Aleutian District Tanner crab</b>						
Prerecruit IV	< 70 mm CW	126	1,284	2	0	1,412
Prerecruit III	70 - 91 mm CW	18	420	6	1	445
Prerecruit II	92 - 114 mm CW	6	399	84	30	519
Prerecruit I	≥ 115 mm CW and sublegal	0	126	141	115	382
Recruit	< 165 mm CW and legal soft/new	0	27			27
Postrecruit	≥ 165 mm CW or legal and not soft/new	0	1	45	37	83
Total		150	2,257	278	183	2,868
Mature only	≥ 115 mm CW		0	154	186	152

Table 3.—Tanner crab abundance estimates from bottom trawl surveys in the Kodiak District, 1988–2013.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)			Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm				
<b>Northeast Section</b>														
1988	1,354,563	217,078	1,571,638	1,274,732	289,983	268,883	326,707	190,027	15,768	13,809	219,603	2,379,906	3,951,540	
1989	3,562,665	2,901,955	6,464,622	3,450,667	1,199,743	1,310,029	1,079,253	599,728	70,706	112,008	782,443	7,822,131	14,286,750	
1990	1,146,817	1,903,207	3,050,024	943,650	1,037,219	720,004	586,379	257,979	56,545	54,928	369,451	3,656,706	6,706,726	
1991	3,144,089	1,651,931	4,796,019	2,582,124	1,110,887	1,120,967	992,477	429,496	19,580	52,116	501,194	6,307,649	11,103,662	
1992	1,560,481	1,116,510	2,676,992	1,199,954	1,136,238	843,412	746,968	206,437	14,149	7,070	227,655	4,154,223	6,831,213	
1993	1,003,154	712,050	1,715,206	957,185	286,858	493,452	515,267	265,334	21,702	16,787	303,823	2,556,583	4,271,788	
1994	379,160	675,363	1,054,522	369,462	145,016	177,380	278,265	87,780	43,550	2,401	133,732	1,103,859	2,158,380	
1995	2,881,474	634,972	3,516,446	2,802,299	689,231	194,665	172,907	9,823	54,115	0	63,938	3,923,037	7,439,481	
1996	1,537,904	1,245,559	2,783,465	1,191,112	1,555,298	844,004	276,488	29,604	34,066	1,604	65,273	3,932,173	6,715,636	
1997	367,576	667,066	1,034,641	389,356	829,336	821,252	414,430	40,953	18,402	0	61,632	2,516,008	3,550,650	
1998	1,432,219	2,489,211	3,921,433	1,035,848	2,227,219	1,821,360	1,390,255	233,803	42,610	11,255	287,669	6,763,756	10,685,184	
1999	1,548,521	948,973	2,497,494	1,758,178	265,791	564,559	709,719	173,790	104,130	1,904	279,826	3,578,072	6,075,563	
2000	5,612,101	1,392,676	7,004,776	5,488,536	1,142,866	701,967	813,908	296,792	232,186	12,240	541,220	8,693,242	15,698,017	
2001	14,224,509	4,717,370	18,941,884	13,744,180	4,971,609	2,796,557	1,458,801	160,749	249,893	2,963	413,604	23,384,747	42,326,627	
2002	3,556,337	2,324,491	5,880,827	3,822,565	2,408,504	2,343,203	1,608,007	186,087	45,108	0	231,195	10,413,463	16,294,283	
2003	1,397,871	2,655,317	4,053,190	1,527,024	1,671,604	2,965,222	2,719,471	367,217	134,752	5,115	507,088	9,390,400	13,443,591	
2004	2,675,275	4,068,495	6,743,769	2,370,872	1,261,423	2,032,007	2,900,407	871,582	128,281	13,008	1,012,868	9,577,567	16,321,335	
2005	3,640,106	3,090,388	6,730,489	3,927,579	1,467,199	1,434,734	2,797,064	784,428	257,122	4,905	1,046,453	10,673,021	17,403,505	
2006	8,299,208	1,778,568	10,077,776	7,409,023	2,315,274	941,307	918,622	124,433	112,352	7,640	244,424	11,828,644	21,906,413	
2007	5,647,488	2,056,515	7,704,011	4,069,065	2,309,251	2,300,020	1,929,099	174,433	167,966	0	342,396	10,949,823	18,653,830	
2008	6,202,343	2,887,383	9,089,720	5,634,536	1,841,866	2,523,683	1,749,983	236,512	99,876	3,798	340,185	12,090,245	21,179,965	
2009	3,151,614	1,871,597	5,023,208	2,616,365	2,911,974	3,088,462	2,665,171	660,261	27,141	0	687,402	11,969,368	16,992,570	
2010	2,609,808	3,919,178	6,528,986	2,409,673	1,654,530	1,082,441	2,154,069	508,471	284,974	13,066	806,513	8,107,216	14,636,198	
2011	1,170,402	951,553	2,122,530	1,225,874	216,752	378,393	860,921	89,261	180,250	2,564	282,944	2,964,876	5,087,405	
2012	4,060,858	642,565	4,703,423	3,971,588	165,200	203,056	564,008	38,217	179,306	0	217,523	5,121,379	9,824,797	
2013	24,153,683	924,263	25,077,944	23,958,866	1,505,604	424,102	217,363	38,337	66,306	0	109,389	26,215,315	51,293,257	
<b>Eastside Section</b>														
1988	2,061,612	762,131	2,823,741	1,599,434	434,894	610,398	689,188	279,635	97,689	1,914	379,236	3,713,138	6,536,873	
1989	2,317,720	3,435,663	5,753,382	1,980,606	1,228,590	1,376,860	1,267,477	803,733	265,385	29,979	1,099,095	6,952,620	12,705,993	
1990	1,474,420	9,743,534	11,217,949	1,248,609	670,041	1,957,553	3,885,702	752,612	135,298	57,684	945,596	8,707,493	19,925,444	
1991	1,502,408	3,688,811	5,191,212	1,208,037	305,498	665,703	2,695,398	3,037,784	495,211	38,804	3,571,802	8,446,428	13,637,637	
1992	1,496,933	1,974,291	3,471,219	1,614,073	332,577	503,076	1,607,073	538,014	270,350	76,998	885,359	4,942,146	8,413,360	
1993	1,723,645	1,504,593	3,228,233	1,362,718	252,488	406,370	1,003,473	116,158	375,400	18,761	510,320	3,535,354	6,763,587	
1994	1,768,545	571,131	2,339,674	1,311,718	706,289	465,080	572,335	47,970	122,224	2,837	173,030	3,228,440	5,568,113	
1995	3,796,919	505,422	4,302,338	3,326,875	594,529	456,568	411,404	28,656	84,020	2,394	115,069	4,904,441	9,206,776	
1996	2,099,149	916,541	3,015,687	2,187,039	705,080	609,876	849,489	107,557	179,489	14,539	301,583	4,653,060	7,668,750	
1997	802,759	652,062	1,454,823	772,755	678,463	724,638	708,745	118,243	104,662	15,679	238,584	3,123,182	4,578,002	
1998	4,404,845	2,431,490	6,836,331	3,867,630	1,770,282	2,730,752	2,243,275	294,484	440,937	86,566	821,987	11,433,925	18,270,254	

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Table 3.—Page 2 of 5

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
1999	6,310,010	1,600,247	7,910,253	5,119,000	408,238	1,087,114	2,085,986	382,318	799,959	120,985	1,303,262	10,003,590	17,913,837
2000	5,398,723	3,674,341	9,073,059	5,190,112	1,536,413	723,524	1,849,312	491,788	888,960	79,337	1,460,088	10,759,437	19,832,495
2001	28,315,476	3,112,801	31,428,278	22,797,216	3,242,923	1,459,292	1,198,178	72,247	1,114,209	87,196	1,273,651	29,971,255	61,399,533
2002	15,562,836	5,106,468	20,669,305	4,210,311	9,013,454	2,980,690	1,443,261	278,685	695,323	40,874	1,014,881	18,662,589	39,331,894
2003	2,538,553	10,743,918	13,282,473	2,658,298	3,103,448	10,681,111	5,693,592	224,498	497,337	26,157	747,989	22,884,433	36,166,904
2004	4,253,152	3,190,654	7,443,810	3,826,028	1,146,767	3,560,082	8,910,259	1,242,489	210,371	12,804	1,465,666	18,908,799	26,352,608
2005	1,555,530	3,316,790	4,872,320	1,768,741	135,364	1,329,192	7,272,525	3,119,978	562,552	52,577	3,735,106	14,240,924	19,113,246
2006	31,188,007	560,029	31,748,035	27,977,142	510,977	593,571	4,873,241	762,936	1,972,515	23,297	2,758,751	36,713,676	68,461,704
2007	41,719,338	2,377,545	44,096,877	21,273,691	25,935,359	1,605,777	3,832,203	211,070	1,459,224	19,162	1,689,456	54,336,471	98,433,348
2008	9,194,846	14,228,404	23,423,248	6,778,541	4,641,796	12,247,181	2,638,020	96,815	1,000,301	32,203	1,129,318	27,434,846	50,858,092
2009	2,971,070	10,171,061	13,142,131	713,239	3,485,397	5,299,719	13,579,233	2,465,072	283,128	39,072	2,787,271	25,864,842	39,006,970
2010	2,270,293	6,593,711	8,864,007	1,988,996	276,452	2,240,091	10,231,640	3,525,464	1,085,738	103,669	4,714,871	19,452,032	28,316,042
2011	5,284,450	2,629,107	7,917,357	5,207,569	106,517	562,576	4,291,741	1,081,083	1,298,589	55,296	2,434,967	12,603,359	20,520,713
2012	2,580,953	528,942	3,109,895	2,551,792	114,209	449,397	4,005,572	572,867	2,120,042	141,893	2,834,799	9,955,764	13,065,652
2013	31,043,971	540,413	31,584,385	29,714,530	1,410,781	428,598	1,102,368	14,128	611,938	28,389	654,455	33,310,730	64,895,112
Southeast Section													
1988	200,497	283,473	483,970	157,833	159,910	420,986	1,034,596	663,903	123,022	46,508	833,434	2,606,755	3,090,725
1989	889,864	433,255	1,323,119	678,165	82,753	165,490	478,213	152,444	69,701	9,771	231,914	1,636,530	2,959,639
1990	1,103,929	667,540	1,771,468	1,042,974	104,310	226,362	509,185	279,905	100,818	4,420	385,142	2,267,965	4,039,429
1991	4,622,254	846,496	5,468,750	4,411,554	418,644	247,522	332,468	171,063	33,757	7,382	212,203	5,622,382	11,091,131
1992	2,145,762	1,295,586	3,441,342	1,640,284	676,401	433,272	576,851	32,734	131,767	9,970	174,472	3,501,275	6,942,612
1993	3,937,489	599,152	4,536,636	3,662,608	249,525	433,469	414,651	27,357	116,382	8,769	152,508	4,912,758	9,449,390
1994	112,690	222,891	335,580	88,248	28,664	87,917	474,049	108,209	54,865	4,252	167,325	846,202	1,181,783
1995	2,728,374	110,416	2,838,788	2,425,956	15,058	28,567	82,914	76,922	47,722	2,370	127,013	2,679,503	5,518,291
1996	2,567,949	141,850	2,709,796	2,275,506	486,974	112,033	124,449	55,489	68,182	7,990	131,660	3,130,611	5,840,404
1997	460,020	141,759	601,779	361,126	206,539	114,929	45,617	3,133	45,000	1,337	49,471	777,677	1,379,455
1998	1,989,704	128,041	2,117,746	2,242,548	47,419	92,558	228,165	28,851	26,243	866	55,960	2,666,650	4,784,391
1999	3,996,432	162,133	4,158,564	4,106,466	99,398	96,118	196,110	127,718	66,631	8,583	202,931	4,701,024	8,859,587
2000	3,429,039	365,885	3,794,922	3,758,976	303,921	81,514	189,459	19,224	127,295	253	146,773	4,480,631	8,275,551
2001	9,488,305	2,951,287	12,439,595	9,581,995	2,259,658	347,865	323,337	48,356	226,017	13,947	288,322	12,801,173	25,240,766
2002	2,704,520	1,415,379	4,119,898	3,062,744	4,500,968	2,670,371	405,352	21,057	365,786	5,094	391,938	11,031,370	15,151,262
2003	485,324	486,433	971,755	633,559	1,571,809	1,719,939	1,007,266	53,344	101,025	0	154,368	5,086,935	6,058,690
2004	4,557,134	362,642	4,919,772	4,319,951	438,628	604,252	1,734,860	254,883	61,506	0	316,387	7,414,074	12,333,843
2005	3,974,816	543,333	4,518,148	3,772,471	377,237	482,212	1,505,853	103,931	212,793	1,411	318,135	6,455,897	10,974,042
2006	14,229,497	1,407,828	15,637,326	14,507,269	1,003,803	554,434	1,071,796	7,806	301,186	0	308,990	17,446,288	33,083,614
2007	11,147,631	4,023,885	15,171,517	8,136,054	8,499,631	2,091,359	1,137,307	10,109	296,480	0	306,590	20,170,931	35,342,446
2008	1,257,827	1,789,092	3,046,919	1,082,572	1,697,133	3,423,425	1,317,045	28,846	135,311	0	164,157	7,684,324	10,731,234
2009	461,747	953,150	1,414,896	575,126	562,448	1,241,843	3,237,290	689,613	41,942	5,463	737,020	6,353,725	7,768,620

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Table 3.—Page 3 of 5.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
2010	2,765,279	1,200,706	3,965,983	2,152,156	291,725	1,189,260	4,497,766	1,051,935	547,876	7,263	1,607,073	9,737,972	13,703,955
2011	1,680,379	396,584	2,076,961	1,793,239	74,326	275,014	1,984,475	349,879	1,443,757	43,057	1,836,691	5,963,736	8,040,692
2012	2,641,094	117,645	2,758,739	2,294,756	1,061,299	328,130	1,278,907	13,636	899,049	27,446	940,131	5,903,217	8,661,956
2013	14,824,757	327,711	15,152,466	13,028,248	744,088	179,865	509,315	32,203	437,505	13,646	483,354	14,944,865	30,097,334
<b>Southwest Section</b>													
1988	168,241	101,027	269,266	146,165	12,664	42,072	441,675	805,810	37,444	36,343	879,598	1,522,179	1,791,445
1989	2,161,446	149,408	2,310,854	1,974,657	115,379	120,845	251,155	184,204	85,314	54,731	324,251	2,786,286	5,097,141
1990	2,378,410	604,993	2,983,400	1,914,348	844,074	463,410	353,987	35,574	34,465	6,232	76,272	3,652,090	6,635,489
1991	1,245,204	184,801	1,430,009	1,026,247	211,779	325,523	482,974	93,291	37,950	3,471	134,713	2,181,238	3,611,240
1992	457,701	199,984	657,687	452,004	154,433	321,545	234,993	268,797	67,275	4,972	347,850	1,510,826	2,168,510
1993	6,656,831	244,880	6,901,712	6,173,568	505,032	182,383	392,983	251,151	69,761	13,352	334,263	7,588,231	14,489,938
1994	205,702	120,562	326,266	131,883	70,631	60,596	145,516	129,012	23,086	7,429	159,528	568,154	894,421
1995	151,983	91,200	243,183	137,703	57,629	109,652	124,067	33,632	48,012	0	81,642	510,695	753,877
1996	348,244	44,723	392,967	326,523	98,732	162,622	240,134	36,056	74,311	1,571	111,940	939,945	1,332,916
1997	265,172	66,131	331,303	255,708	102,022	82,314	185,339	123,764	88,079	3,169	216,032	841,415	1,172,719
1998	240,981	36,904	277,887	234,957	60,269	54,856	63,017	22,385	86,073	2,193	110,654	523,754	801,642
1999	816,972	30,112	847,079	844,138	56,872	45,036	176,080	33,257	119,806	4,314	157,380	1,279,504	2,126,585
2000	3,009,608	67,986	3,077,591	2,954,868	185,143	113,642	167,077	54,853	104,402	714	159,969	3,580,700	6,658,290
2001	9,672,768	316,212	9,988,979	7,059,524	3,525,999	295,809	217,015	117,119	74,703	1,972	193,797	11,292,141	21,281,118
2002	2,512,503	977,812	3,490,315	1,591,013	1,805,551	1,786,814	426,985	85,254	74,423	1,974	161,652	5,772,011	9,262,329
2003	89,552	308,930	398,483	74,124	335,702	799,556	1,319,622	115,208	89,783	8,873	213,865	2,742,868	3,141,350
2004	339,318	310,200	649,517	307,349	65,503	319,995	958,023	1,234,236	131,485	16,512	1,382,233	3,033,102	3,682,621
2005	594,163	226,717	820,882	566,754	43,965	158,694	593,624	337,438	467,100	22,971	827,508	2,190,542	3,011,422
2006	6,083,090	599,707	6,682,799	7,081,452	243,424	134,088	470,954	106,125	599,976	23,463	729,563	8,659,481	15,342,283
2007	10,427,476	1,418,621	11,846,098	8,459,186	3,214,163	511,501	613,319	135,796	1,052,076	29,074	1,216,944	14,015,110	25,861,206
2008	5,896,237	3,635,586	9,531,824	2,281,075	5,997,435	4,618,642	705,968	129,965	245,688	9,747	385,400	13,988,520	23,520,341
2009	372,548	2,355,494	2,728,040	185,107	537,600	2,512,879	3,365,105	239,277	140,077	8,254	387,610	6,988,301	9,716,347
2010	41,228	3,260,718	3,301,947	24,725	89,283	1,413,042	4,628,258	1,040,662	191,450	6,499	1,238,613	7,393,920	10,695,866
2011	351,460	682,149	1,033,969	340,014	9,730	59,931	770,507	330,665	421,889	13,094	766,008	1,946,186	2,980,159
2012	651,509	731,402	1,382,912	691,609	29,696	43,232	578,782	29,725	514,252	10,480	579,235	1,922,554	3,305,464
2013	19,348,907	242,245	19,591,156	18,807,043	527,903	138,491	413,483	1,202	307,769	5,957	314,928	20,201,853	39,793,007
<b>Westside Section</b>													
1988	970,601	515,472	1,486,074	748,320	50,614	199,783	264,921	135,354	18,143	11,886	165,384	1,429,018	2,915,089
1989	3,479,271	551,919	4,031,190	2,765,719	496,645	261,120	283,878	115,149	19,287	4,741	139,177	3,946,536	7,977,729
1990	711,701	2,095,150	2,806,854	351,550	641,582	373,763	461,881	100,744	54,900	14,632	170,276	1,999,049	4,805,903
1991	191,465	566,348	757,814	130,432	145,919	484,967	439,399	35,343	22,320	4,211	61,876	1,262,593	2,020,406
1992	168,907	419,821	588,729	129,030	171,208	214,116	299,797	114,508	46,032	5,616	166,156	980,310	1,569,035
1993	397,675	569,780	967,457	266,120	160,850	148,165	263,960	45,811	86,363	6,767	138,938	978,040	1,945,497
1994	158,351	248,765	407,116	108,532	113,241	74,756	90,261	31,732	42,413	0	74,149	460,938	868,061

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Table 3.—Page 4 of 5.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
1995	168,592	394,759	563,352	107,727	163,412	158,089	135,944	14,105	88,641	2,203	104,951	670,125	1,233,481
1996	221,984	406,956	628,942	104,838	263,795	293,384	226,222	36,715	99,629	469	136,815	1,025,059	1,654,001
1997	221,626	675,157	896,784	83,886	291,925	416,764	292,420	67,195	62,405	2,605	132,205	1,217,201	2,113,986
1998	783,575	639,572	1,423,147	693,719	170,270	289,460	223,183	26,840	53,771	3,008	83,621	1,460,256	2,883,401
1999	786,633	303,891	1,090,528	495,747	389,828	252,141	208,931	43,439	102,079	8,631	154,151	1,500,799	2,591,322
2000	857,983	673,744	1,531,726	529,492	452,760	470,344	245,893	88,067	73,382	11,132	172,580	1,871,071	3,402,796
2001	1,838,858	867,797	2,706,655	1,454,818	690,480	406,475	419,781	61,894	74,190	9,850	145,933	3,117,483	5,824,141
2002	527,722	793,616	1,321,340	314,807	576,533	490,709	314,587	97,176	71,244	9,680	178,098	1,874,738	3,196,077
2003	571,353	1,595,583	2,166,935	527,990	305,060	850,071	549,657	114,971	113,968	10,548	239,486	2,472,262	4,639,202
2004	348,491	536,566	885,057	318,080	123,002	164,582	183,538	105,808	75,246	6,710	187,762	976,964	1,862,027
2005	1,277,045	612,264	1,889,310	1,010,851	367,489	312,238	187,999	58,631	114,705	6,418	179,753	2,058,329	3,947,639
2006	2,743,480	1,978,839	4,722,322	2,050,866	1,069,393	739,258	422,756	61,494	242,097	26,030	329,622	4,611,892	9,334,219
2007	728,050	1,229,735	1,957,783	346,342	1,001,330	638,751	366,951	55,293	203,496	12,441	271,233	2,624,613	4,582,398
2008	1,512,322	1,677,824	3,190,145	1,337,898	816,547	1,306,246	1,483,097	216,263	28,473	18,447	263,184	5,206,972	8,397,115
2009	1,035,614	1,624,414	2,660,033	801,669	518,633	566,992	682,822	329,135	53,427	10,634	393,196	2,963,312	5,623,343
2010	487,127	1,154,821	1,641,949	449,979	262,351	403,098	397,571	137,521	140,056	15,631	293,211	1,806,207	3,448,153
2011	796,308	592,852	1,389,159	916,487	63,828	96,545	199,071	42,043	101,665	20,900	164,607	1,440,538	2,829,698
2012	1,230,971	597,220	1,828,188	1,210,838	694,666	197,830	142,793	48,115	69,367	20,940	138,422	2,384,543	4,212,731
2013	1,845,914	747,782	2,593,696	1,486,424	945,497	484,694	171,860	34,055	49,742	3,942	87,740	3,176,215	5,769,911
North Mainland Section													
1988	3,803,918	864,861	4,668,774	3,414,071	165,284	455,217	1,183,668	754,408	82,256	19,542	856,202	6,074,429	10,743,199
1989	3,969,314	1,434,954	5,404,260	3,877,932	295,569	350,999	1,158,793	189,639	109,856	25,549	325,042	6,008,316	11,412,570
1990	6,785,956	3,258,002	10,043,956	5,787,780	2,123,024	755,595	1,447,654	105,810	113,735	12,042	231,587	10,345,625	20,389,574
1991	756,795	1,115,682	1,872,473	604,265	606,410	538,129	947,691	73,675	110,321	4,747	188,743	2,885,230	4,757,700
1992	2,380,859	898,210	3,279,064	2,277,881	225,267	394,130	760,276	115,928	71,015	18,074	205,016	3,862,553	7,141,614
1993	3,812,336	1,022,424	4,834,760	3,215,647	150,171	418,016	820,823	157,191	146,366	36,468	340,024	4,944,670	9,779,427
1994	3,023,464	536,326	3,559,785	2,228,793	544,326	232,789	360,222	143,779	116,171	58,654	318,600	3,684,721	7,244,504
1995	626,586	246,766	873,352	676,802	133,804	61,121	151,273	38,079	49,674	18,654	106,405	1,129,397	2,002,745
1996	4,440,247	390,480	4,830,724	4,282,618	340,132	215,938	341,477	34,667	164,164	21,683	220,512	5,400,663	10,231,385
1997	2,395,879	263,515	2,659,391	2,345,315	505,071	343,654	654,118	56,366	183,001	8,054	247,417	4,095,567	6,754,956
1998	3,768,977	228,212	3,997,185	3,527,326	316,628	274,498	293,843	7,596	121,637	15,550	144,781	4,557,071	8,554,251
1999	3,978,558	249,442	4,227,996	4,095,930	513,789	193,813	560,732	46,816	102,885	0	149,700	5,513,955	9,741,951
2000	4,426,732	535,607	4,962,337	4,544,305	1,373,199	537,535	345,613	66,809	57,974	2,151	126,932	6,927,573	11,889,904
2001	5,571,967	581,737	6,153,698	5,958,910	493,796	449,541	398,103	21,432	174,614	5,736	201,780	7,502,119	13,655,815
2002	7,070,671	651,122	7,721,788	7,272,356	2,446,359	930,488	220,236	9,268	26,941	358	36,568	10,905,999	18,627,785
2003	1,587,275	1,005,976	2,593,247	3,245,030	614,372	253,586	227,890	23,143	52,385	4,156	79,684	4,420,553	7,013,798
2004	4,827,287	273,465	5,100,750	4,066,870	288,413	396,743	417,827	28,863	52,195	5,164	86,221	5,256,063	10,356,807
2005	6,017,629	608,052	6,625,677	5,495,788	571,959	188,006	255,203	64,158	23,541	2,023	89,723	6,600,666	13,226,334
2006	5,865,058	1,934,340	7,799,394	6,395,502	1,559,448	806,047	167,646	130,695	39,728	15,957	186,380	9,115,018	16,914,410

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Table 3.—Page 5 of 5.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
2007	1,165,031	273,927	1,438,960	1,349,852	79,351	170,283	207,977	32,345	78,147	25,821	136,314	1,943,767	3,382,721
2008	2,046,897	166,688	2,213,584	2,135,203	28,454	75,700	224,712	11,471	114,250	22,573	148,294	2,612,354	4,825,933
2009	2,285,824	183,381	2,469,202	1,996,739	69,811	180,720	384,244	0	157,132	25,713	182,846	2,814,356	5,283,555
2010	2,086,932	289,967	2,376,892	2,139,002	216,572	386,245	319,907	41,817	39,193	7,747	88,756	3,150,473	5,527,360
2011	7,379,368	159,146	7,538,512	7,351,002	174,676	280,882	472,413	67,174	9,494	13,894	90,561	8,369,531	15,908,038
2012	2,394,801	59,001	2,453,802	2,436,596	30,897	77,286	199,129	257,161	16,018	19,047	292,225	3,036,134	5,489,937
2013	3,528,706	431,504	3,960,211	3,721,679	272,190	176,174	136,384	55,005	74,411	32,712	162,128	4,468,550	8,428,755
<b>KODIAK DISTRICT TOTALS</b>													
1988	8,559,432	2,744,042	11,303,463	7,340,555	1,113,349	1,997,339	3,940,755	2,829,137	374,322	130,002	3,333,457	17,725,425	29,028,871
1989	16,380,280	8,907,154	25,287,427	14,727,746	3,418,679	3,585,343	4,518,769	2,044,897	620,249	236,779	2,901,922	29,152,419	54,439,822
1990	13,601,233	18,272,426	31,873,651	11,288,911	5,420,250	4,496,687	7,244,788	1,532,624	495,761	149,938	2,178,324	30,628,928	62,502,565
1991	11,462,215	8,054,069	19,516,277	9,962,659	2,799,137	3,382,811	5,890,407	3,840,652	719,139	110,731	4,670,531	26,705,520	46,221,776
1992	8,210,643	5,904,402	14,115,033	7,313,226	2,696,124	2,709,551	4,225,958	1,276,418	600,588	122,700	2,006,508	18,951,333	33,066,344
1993	17,531,130	4,652,879	22,184,004	15,637,846	1,604,924	2,081,855	3,411,157	863,002	815,974	100,904	1,779,876	24,515,636	46,699,627
1994	5,647,912	2,375,038	8,022,943	4,238,636	1,608,167	1,098,518	1,920,648	548,482	402,309	75,573	1,026,364	9,892,314	17,915,262
1995	10,353,928	1,983,535	12,337,459	9,477,362	1,653,663	1,008,662	1,078,509	201,217	372,184	25,621	599,018	13,817,198	26,154,651
1996	11,215,477	3,146,109	14,361,581	10,367,636	3,450,011	2,237,857	2,058,259	300,088	619,841	47,856	967,783	19,081,511	33,443,092
1997	4,513,032	2,465,690	6,978,721	4,208,146	2,613,356	2,503,551	2,300,669	409,654	501,549	30,844	945,341	12,571,050	19,549,768
1998	12,620,301	5,953,430	18,573,729	11,602,028	4,592,087	5,263,484	4,441,738	613,959	771,271	119,438	1,504,672	27,405,412	45,979,123
1999	17,437,126	3,294,798	20,731,914	16,419,459	1,733,916	2,238,781	3,937,558	807,338	1,295,490	144,417	2,247,250	26,576,944	47,308,845
2000	22,734,186	6,710,239	29,444,411	22,466,289	4,994,302	2,628,526	3,611,262	1,017,533	1,484,199	105,827	2,607,562	36,312,654	65,757,053
2001	69,111,883	12,547,204	81,659,089	60,596,643	15,184,465	5,755,539	4,015,215	481,797	1,913,626	121,664	2,517,087	88,068,918	169,728,000
2002	31,934,589	11,268,888	43,203,473	20,273,796	20,751,369	11,202,275	4,418,428	677,527	1,278,825	57,980	2,014,332	58,660,170	101,863,630
2003	6,669,928	16,796,157	23,466,083	8,666,025	7,601,995	17,269,485	11,517,498	898,381	989,250	54,849	1,942,480	46,997,451	70,463,535
2004	17,000,657	8,742,022	25,742,675	15,209,150	3,323,736	7,077,661	15,104,914	3,737,861	659,084	54,198	4,451,137	45,166,569	70,909,241
2005	17,059,289	8,397,544	25,456,826	16,542,184	2,963,213	3,905,076	12,612,268	4,468,564	1,637,813	90,305	6,196,678	42,219,379	67,676,188
2006	68,408,340	8,259,311	76,667,652	65,421,254	6,702,319	3,768,705	7,925,015	1,193,489	3,267,854	96,387	4,557,730	88,374,999	165,042,643
2007	70,835,014	11,380,228	82,215,246	43,634,190	41,039,085	7,317,691	8,086,856	619,046	3,257,389	86,498	3,962,933	104,040,715	186,255,949
2008	26,110,472	24,384,977	50,495,440	19,249,825	15,023,231	24,194,877	8,118,825	719,872	1,623,899	86,768	2,430,538	69,017,261	119,512,680
2009	10,278,417	17,159,097	27,437,510	6,888,245	8,085,863	12,890,615	23,913,865	4,383,358	702,847	89,136	5,175,345	56,953,904	84,391,405
2010	10,260,667	16,419,101	26,679,764	9,164,531	2,790,913	6,714,177	22,225,254	6,305,870	2,289,287	157,832	8,752,994	49,647,820	76,327,574
2011	16,662,367	5,411,391	22,078,488	16,834,185	645,829	1,653,341	8,579,128	1,960,105	3,455,644	148,805	5,575,778	33,288,226	55,366,705
2012	13,560,186	2,676,775	16,236,959	13,157,179	2,095,967	1,298,931	6,769,191	959,721	3,798,034	219,806	5,002,335	28,323,591	44,560,537
2013	94,745,938	3,213,918	97,959,858	90,716,790	5,406,063	1,831,924	2,550,773	174,930	1,547,671	84,646	1,811,994	102,317,528	200,277,376

Table 4.—Tanner crab regulatory harvest strategies abundance threshold levels in number of crab, estimates of number of mature male crab by survey year, and fishery guideline harvest levels (GHLs) from bottom trawl surveys, 2009–2013.

	Threshold (no. of mature males >114 mm)	No. of Mature Males (CW > 114 mm)				
		2009	2010	2011	2012	2013
Kodiak District						
Northeast Section	1,123,000	<b>3,352,571</b>	<b>2,960,578</b>	<b>1,143,859</b>	781,530	326,746
Eastside Section	1,552,000	<b>16,366,497</b>	<b>14,946,506</b>	<b>6,726,701</b>	<b>6,863,093</b>	<b>1,756,823</b>
Southeast Section	733,000	<b>3,974,309</b>	<b>6,104,837</b>	<b>3,821,163</b>	<b>2,219,031</b>	<b>992,667</b>
Southwest Section	1,236,000	<b>3,752,717</b>	<b>5,866,870</b>	<b>1,536,513</b>	1,158,016	728,411
Westside Section	764,000	<b>1,076,021</b>	690,780	363,678	281,213	259,600
North Mainland Section	1,469,000	567,085	408,659	562,973	491,353	298,510
Chignik District	973,000	<b>5,138,041</b>	<b>11,127,240</b>	<b>5,947,972</b>	<b>1,616,431</b>	<b>1,653,733</b>
South Peninsula District						
Eastern Section	2,015,000	<b>13,089,596</b>	<b>9,845,840</b>	<b>4,554,806</b>	<b>4,145,991</b>	709,695
Western Section	1,250,000	<b>12,927,087</b>	<b>13,162,254</b>	<b>6,498,593</b>	<b>2,433,936</b>	959,803
Eastern Aleutian District						
Akutan Section	200,000	<b>513,229</b>	<b>420,268</b>	<b>215,728</b>	149,485	88,268
Unalaska/Kalekta Bay Section	65,000	<b>501,010</b>	10,542	49,644	<b>625,838</b>	<b>182,886</b>
Makushin/Skan Bay Section	45,000	<b>252,880</b>	<b>283,475</b>	<b>315,998</b>	<b>135,313</b>	<b>155,397</b>

	Minimum GHL (pounds)	GHL for following Tanner season (Pounds)				
		2009	2010	2011	2012	2013
Kodiak District						
Northeast Section	100,000	<b>100,000</b>	<b>100,000</b>	— <sup>a</sup>	below threshold	below threshold
Eastside Section	100,000	<b>500,000</b>	<b>1,000,000</b>	<b>550,000</b>	<b>520,000</b>	— <sup>a</sup>
Southeast Section	100,000	<b>100,000</b>	<b>240,000</b>	<b>300,000</b>	<b>140,000</b>	— <sup>a</sup>
Southwest Section	100,000	closed <sup>b</sup>	<b>150,000</b>	<b>100,000</b>	below threshold	below threshold
Westside Section	100,000	closed <sup>b</sup>	below threshold	below threshold	below threshold	below threshold
North Mainland Section	100,000	below threshold	below threshold	below threshold	below threshold	below threshold
Chignik District	200,000	closed <sup>b</sup>	<b>600,000</b>	<b>700,000</b>	— <sup>a</sup>	— <sup>a</sup>
South Peninsula District						
Eastern Section	200,000	<b>300,000</b>	<b>900,000</b>	<b>380,000</b>	<b>230,000</b>	below threshold
Western Section	200,000	<b>200,000</b>	<b>1,400,000</b>	<b>1,240,000</b>	— <sup>a</sup>	below threshold
Eastern Aleutian District						
Akutan Section	35,000	<b>45,000</b>	<b>35,000</b>	— <sup>a</sup>	below threshold	below threshold
Unalaska/Kalekta Bay Section	35,000	<b>74,000</b>	below threshold	below threshold	<b>35,000</b>	— <sup>a</sup>
Makushin/Skan Bay Section	35,000	— <sup>a</sup>	<b>35,000</b>	<b>35,000</b>	— <sup>a</sup>	— <sup>a</sup>

Note: **Bold** = above mature male harvest strategy threshold

<sup>a</sup> The calculated fishery GHL did not meet minimum GHL requirements.

<sup>b</sup> GHL requirements were met but, due to uncertainty in survey estimates and biological information indicating conservation concerns, the fishery was not opened.

Table 5.—Red king crab abundance estimates from trawl surveys in the Kodiak and Alaska Peninsula areas, 2004–2013.

Year	Females			Prerecruit Males				Recruit Males	Post-recruit Males	Legal Males	Total Male	Total Crab					
	Juvenile	Adult	Total	IV	III	II	I										
<b>KODIAK AREA</b>																	
<b>Northeast District</b>																	
2004	0	1,641	1,641	0	0	0	0	0	4,765	4,765	4,765	6,406					
2005	0	1,952	1,952	0	0	208	416	0	2,173	2,173	2,173	4,749					
2006	353	8,551	8,904	0	177	177	353	911	3,681	4,592	5,298	14,201					
2007	451	2,112	2,563	0	0	0	0	0	0	0	0	2,563					
2008	0	369	369	0	0	0	0	0	1,098	1,098	1,098	1,467					
2009	635	270	905	270	1,080	270	0	270	0	270	1,890	2,795					
2010	0	0	0	0	347	0	0	0	0	0	347	347					
2011	0	0	0	0	0	1,419	0	0	0	0	1,419	1,419					
2012	0	0	0	0	0	0	0	0	0	0	0	0					
2013	1,519	1,182	2,701	270	0	0	0	0	0	0	270	2,971					
<b>Southeast District</b>																	
2004	0	0	0	0	0	0	0	0	0	0	0	0					
2005	0	0	0	0	0	0	0	0	0	0	0	0					
2006	0	0	0	0	0	0	0	0	1,890	1,890	1,890	1,890					
2007	0	0	0	0	0	0	0	729	668	1,397	1,397	1,397					
2008	0	0	0	513	0	0	0	0	0	0	513	513					
2009	0	0	0	0	0	0	0	0	0	0	0	0					
2010	0	0	0	0	0	0	0	0	0	0	0	0					
2011	0	0	0	0	0	0	0	0	0	0	0	0					
2012	0	0	0	0	0	0	0	0	0	0	0	0					
2013	0	0	0	4,232	0	0	0	0	0	0	4,232	4,232					
<b>Southwest District</b>																	
2004	7,136	30,928	38,064	0	4,702	17,929	6,928	6,760	14,754	21,514	51,074	89,138					
2005	2,856	32,151	35,007	0	7,689	11,613	12,374	6,341	20,777	27,118	58,792	93,799					
2006	4,010	44,868	48,878	4,679	4,679	10,102	9,874	23,631	47,145	70,773	100,107	148,986					
2007	387,177	5,309	392,486	337,765	0	714	551	7,588	11,069	18,657	357,685	750,172					
2008	8,655	6,477	15,133	6,295	787	0	2,471	4,421	21,462	25,883	35,435	50,567					
2009	152	3,727	3,879	4,166	0	0	0	1,831	14,181	16,013	20,179	24,058					
2010	26,655	22,075	48,730	22,907	22,658	10,572	787	3,211	23,842	27,054	83,978	132,708					

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Table 5.–Page 2 of 6.

Year	Females			Prerecruit Males				Recruit Males	Post-recruit Males	Legal Males	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2011	140,454	48,314	188,769	74,180	25,982	5,640	4,302	1,124	12,134	13,257	123,362	312,131
2012	45,939	36,492	82,431	2,074	49,552	43,670	5,559	5,917	10,772	16,689	117,543	199,974
2013	19,763	135,960	155,724	1,551	12,884	50,872	30,011	8,948	12,101	21,050	116,369	272,092
<b>Shelikof District</b>												
2004	4,012	29,150	33,162	0	2,424	1,813	14,464	72,913	140,615	213,528	232,228	265,391
2005	0	3,993	3,993	1,227	1,440	2,292	1,574	1,803	2,831	4,633	11,167	15,161
2006	1,337	20,840	22,177	0	2,139	7,696	11,496	3,743	3,650	7,393	28,722	50,899
2007	0	0	0	182	0	0	0	149	267	416	598	598
2008	0	0	0	1,387	0	0	0	0	17,943	17,943	19,330	19,330
2009	1,081	0	1,081	0	0	0	0	120	203	323	323	1,404
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	334	334	0	0	0	0	0	334	334	334	668
2012	0	446	446	0	446	446	0	446	0	446	1,337	1,782
2013	226	0	226	750	226	0	0	0	0	0	976	1,202
<b>KODIAK AREA TOTAL</b>												
2004	11,148	61,719	72,867	0	7,126	19,742	21,392	79,673	160,134	239,807	288,067	360,935
2005	2,856	38,096	40,952	1,227	9,129	14,113	14,364	8,144	25,781	33,924	72,757	113,709
2006	5,700	74,259	79,959	4,679	6,995	17,975	21,723	28,285	56,366	84,648	136,017	215,976
2007	387,628	7,421	395,049	337,947	0	714	551	8,466	12,004	20,470	359,680	754,730
2008	8,655	6,846	15,502	8,195	787	0	2,471	4,421	40,503	44,924	56,376	71,877
2009	1,868	3,997	5,865	4,436	1,080	270	0	2,221	14,384	16,606	22,392	28,257
2010	26,655	22,075	48,730	22,907	23,005	10,572	787	3,211	23,842	27,054	84,325	133,055
2011	140,454	48,648	189,103	74,180	25,982	7,059	4,302	1,124	12,468	13,591	125,115	314,218
2012	45,939	36,938	82,877	2,074	49,998	44,116	5,559	6,363	10,772	17,135	118,880	201,756
2013	21,508	137,142	158,651	6,803	13,110	50,872	30,011	8,948	12,101	21,050	121,847	280,497
<b>ALASKA PENINSULA AREA</b>												
<b>Morzhovoi Bay</b>												
2004	2,937	14,684	17,620	1,468	1,468	10,279	1,468	0	1,468	1,468	16,152	33,772
2005	1,101	3,304	4,405	0	0	2,203	0	1,101	7,853	8,954	11,157	15,562
2006	0	1,428	1,428	0	0	0	0	0	0	0	0	1,428
2007	0	0	0	0	0	881	0	0	0	0	881	881
2008	0	0	0	0	0	0	0	0	0	0	0	0

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Table 5.–Page 3 of 6.

Year	Females			Prerecruit Males				Recruit Males	Post-recruit Males	Legal Males	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	2,517	2,517	0	0	0	0	0	0	0	0	2,517
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	892	24,095	24,988	24,988	24,988
<b>Cold Bay/Belkofski Bay</b>												
2004	2,511	1,212	3,723	2,114	0	0	0	0	0	0	2,114	5,837
2005	2,032	0	2,032	1,531	1,136	0	1,136	0	1,731	1,731	5,536	7,568
2006	483	3,864	4,347	1,170	0	0	322	483	2,467	2,950	4,442	8,789
2007	2,572	693	3,265	1,561	0	0	705	0	0	0	2,266	5,530
2008	0	2,771	2,771	0	0	0	1,170	0	1,659	1,659	2,829	5,599
2009	0	483	483	0	161	161	0	0	0	0	322	805
2010	1,073	28,206	29,280	1,516	537	537	358	0	1,045	1,045	3,992	33,272
2011	433	836	1,269	433	866	433	433	1,299	5,052	6,351	8,515	9,784
2012	8,279	23,754	32,033	1,352	1,484	4,418	1,173	1,195	25,606	26,801	35,228	67,262
2013	1,154	230	1,384	2,678	0	0	0	0	0	0	2,678	4,063
<b>Pavlof Bay/Volcano Bay</b>												
2004	2,110	2,110	4,219	2,110	0	0	0	0	0	0	2,110	6,329
2005	0	0	0	978	0	0	1,208	0	2,415	2,415	4,601	4,601
2006	688	0	688	0	0	0	1,208	0	0	0	1,208	1,896
2007	0	0	0	662	0	0	0	0	949	949	1,611	1,611
2008	0	1,899	1,899	0	0	0	949	0	8,544	8,544	9,494	11,393
2009	0	946	946	0	0	0	0	0	12,580	12,580	12,580	13,526
2010	6,192	23,939	30,131	828	1,208	5,658	4,071	0	1,656	1,656	13,420	43,552
2011	396,062	426,614	822,676	46,000	334,662	605,503	265,585	82,260	65,898	148,158	1,399,908	2,222,584
2012	0	0	0	0	0	0	0	0	5,733	5,733	5,733	5,733
2013	10,653	85,740	96,393	6,038	4,830	37,436	72,456	37,436	28,437	65,873	186,633	283,026
<b>Beaver Bay/Balboa Bay/Unga Strait</b>												
2004	0	1,841	1,841	0	0	0	0	0	0	0	0	1,841
2005	0	747	747	0	0	0	0	0	0	0	0	747
2006	665	1,495	2,160	0	0	0	0	0	4,508	4,508	4,508	6,668
2007	0	0	0	0	0	0	0	0	0	0	0	0

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Table 5.–Page 4 of 6.

Year	Females			Prerecruit Males				Recruit Males	Post-recruit Males	Legal Males	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2008	0	0	0	747	0	0	0	0	2,989	2,989	3,737	3,737
2009	0	0	0	0	0	0	0	0	564	564	564	564
2010	773	0	773	747	0	0	0	0	3,553	3,553	4,301	5,074
2011	0	0	0	0	0	0	921	0	1,709	1,709	2,630	2,630
2012	0	0	0	0	0	0	0	0	3,163	3,163	3,163	3,163
2013	0	0	0	0	0	0	0	0	2,242	2,242	2,242	2,242
<b>Stepovak Bay</b>												
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0
<b>West Nagai Strait</b>												
2004	0	0	0	0	0	0	1,849	0	0	0	1,849	1,849
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	2,054	2,054	0	0	0	0	0	0	0	0	2,054
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	1,135	0	0	0	0	0	0	1,135	1,135
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	5,546	0	5,546	0	0	0	0	0	1,849	0	1,849	7,394
<b>Ivanof Bay</b>												
2004	0	2,288	2,288	0	0	0	0	0	246	246	246	2,534
2005	0	0	0	0	0	0	0	0	2,626	2,626	2,626	2,626
2006	0	933	933	0	0	0	0	0	2,626	2,626	2,626	3,559

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Table 5.–Page 5 of 6.

Year	Females			Prerecruit Males				Recruit Males	Post-recruit Males	Legal Males	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	246	246	246	246
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	1,166	1,166	2,332	0	0	0	2,332	2,332	1,166	3,497	5,829	8,161
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	933	0	0	0	933	3,805	4,737	5,670	5,670
<b>Mitrofania Island</b>												
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	0	0	0	1,282	0	0	0	0	0	0	1,282	1,282
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	2,532	2,532	2,532	2,532
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0
<b>Chignik Bay/Castle Bay</b>												
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0
2006	1,759	4,691	6,450	586	586	293	0	0	586	586	2,052	8,502
2007	0	293	293	0	0	0	0	0	892	892	892	1,185
2008	0	0	0	0	0	0	586	0	3,942	3,942	4,528	4,528
2009	586	586	1,173	586	0	880	1,597	586	2,607	3,193	6,255	7,428
2010	10,554	29,646	40,200	0	5,277	8,795	8,795	0	7,659	7,659	30,526	70,726
2011	0	892	892	0	0	0	1,422	0	892	892	2,313	3,205
2012	892	0	892	0	0	0	1,316	0	0	0	1,316	2,207
2013	1,466	0	1,466	1,759	0	0	1,115	0	0	0	2,874	4,340
<b>Kujulik Bay</b>												
2004	0	0	0	0	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0	0	0	0	0

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Table 5.–Page 6 of 6.

Year	Females			Prerecruit Males				Recruit Males	Post-recruit Males	Legal Males	Total Male	Total Crab
	Juvenile	Adult	Total	IV	III	II	I					
2006	0	0	0	0	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0	0	0	0	0
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0	0	0	0	0
<b>ALASKA PENINSULA AREA TOTAL</b>												
2004	7,558	22,135	29,691	5,692	1,468	10,279	3,317	0	1,714	1,714	22,471	52,162
2005	3,133	4,051	7,184	2,509	1,136	2,203	2,344	1,101	14,625	15,726	23,920	31,104
2006	3,595	14,465	18,060	3,038	586	293	1,530	483	10,187	10,670	16,118	34,178
2007	2,572	986	3,558	2,223	0	881	705	0	1,841	1,841	5,650	9,207
2008	0	4,670	4,670	1,882	0	0	2,705	0	17,134	17,134	21,723	26,392
2009	586	2,015	2,602	586	161	1,041	1,597	586	15,997	16,583	19,967	22,569
2010	18,592	84,308	102,901	3,091	7,022	14,990	13,224	0	16,445	16,445	54,771	157,673
2011	397,661	429,508	827,169	46,433	335,528	605,936	270,693	85,891	74,717	160,607	1,419,195	2,246,364
2012	9,171	23,754	32,925	1,352	1,484	4,418	2,489	1,195	34,502	35,697	45,440	78,365
2013	18,819	85,970	104,789	11,408	4,830	37,436	73,571	41,110	58,579	99,689	226,934	331,723

*Note:* Categories to distinguish juvenile and adult females and prerecruit IV, III, II, I, recruit, and postrecruit males differ by management area; definitions are found in Appendix A1.

Table 6.—Dominant species by weight in the Kodiak Tanner crab District bottom trawl survey, 2013.

Common name	Species name	% of catch by weight
Walleye pollock	<i>Gadus chalcogrammus</i>	25.1
Flathead sole	<i>Hippoglossoides elassodon</i>	18.8
Arrowtooth flounder	<i>Atheresthes stomias</i>	14.0
Pacific cod	<i>Gadus macrocephalus</i>	6.1
Tanner crab	<i>Chionoecetes bairdi</i>	5.0
Sunflower sea star	<i>Pycnopodia helianthoides</i>	3.6
Yellowfin sole	<i>Pleuronectes aspera</i>	3.3
Pacific halibut	<i>Hippoglossus stenolepis</i>	2.8
Longnose skate	<i>Raja rhina</i>	1.7
Starry flounder	<i>Platichthys stellatus</i>	1.5
Big skate	<i>Raja binoculata</i>	1.5
Alaska plaice	<i>Pleuronectes quadrituberculatus</i>	1.4
Bering skate	<i>Bathyraja interrupta</i>	1.0
Weathervane scallop	<i>Patinopecten caurinus</i>	1.0
Aleutian skate	<i>Bathyraja aleutica</i>	1.0
Rex sole	<i>Glyptocephalus zachirus</i>	0.9
Northern rock sole	<i>Lepidotretta polyxystra</i>	0.9
Anemone	Order: Actinaria	0.9
Butter sole	<i>Isopsetta bilineata</i>	0.7
Dover sole	<i>Microstomus pacificus</i>	0.7
All others	(129 species)	8.1
		100.0

Table 7.—Tanner crab abundance estimates from bottom trawl surveys in the South Peninsula and Chignik districts, 1988–2013.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab				
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm							
<b>SOUTH PENINSULA DISTRICT</b>																	
<b>Sanak Island</b>																	
1989	1,041,054	117,259	1,158,314	1,117,338	23,925	31,519	65,234	6,836	0	0	6,836	1,244,851	2,403,166				
1990	603,210	102,533	705,742	456,464	82,684	53,495	22,785	0	0	0	0	615,427	1,321,169				
1991	474,081	28,398	502,478	489,104	32,112	34,178	0	0	0	0	0	555,392	1,057,870				
1992	373,197	41,014	414,210	285,671	44,645	46,627	3,798	0	0	0	0	380,738	794,947				
1993	337,216	19,133	356,348	260,566	30,579	37,410	9,999	0	0	0	0	338,549	694,898				
1994	87,848	69,013	156,859	112,056	13,414	18,801	19,824	0	0	0	0	164,093	320,950				
1996	579,289	134,287	713,578	433,899	53,478	29,470	36,368	0	0	0	0	553,211	1,266,788				
1997	104,892	53,409	158,299	79,646	75,564	38,237	17,180	0	0	0	0	210,623	368,921				
1998	287,243	401,488	688,729	389,589	81,490	125,691	63,941	0	0	0	0	660,710	1,349,437				
1999	88,145	94,727	182,873	55,777	5,043	44,697	20,518	0	0	0	0	126,035	308,906				
2000	606,606	185,506	792,111	563,172	59,648	94,142	32,780	0	2,522	0	2,522	752,262	1,544,370				
2001	914,269	131,632	1,045,901	790,961	56,567	82,328	116,972	5,043	0	0	5,043	1,051,871	2,097,771				
2002	728,706	1,017,860	1,746,566	721,599	274,753	222,696	103,774	0	10,807	0	10,807	1,333,627	3,080,192				
2003	249,807	392,738	642,545	207,329	84,100	222,323	124,490	0	10,086	0	10,086	648,325	1,290,869				
2004	725,772	201,245	927,016	664,316	103,805	57,957	6,674	0	0	0	0	832,751	1,759,767				
2005	264,849	129,560	394,408	219,764	85,954	61,175	0	0	0	0	0	366,889	761,297				
2006	3,211,966	65,347	3,277,314	2,964,522	58,344	84,248	16,974	0	0	0	0	3,124,086	6,401,400				
2007	4,421,280	1,978,615	6,399,895	3,724,236	686,412	245,645	98,712	0	0	0	0	4,755,004	11,154,900				
2008	193,409	1,884,532	2,077,941	876,043	1,844,403	330,640	34,707	0	0	0	0	3,085,792	5,163,733				
2009	77,342	669,415	746,758	97,965	194,977	236,212	61,374	17,075	2,563	0	19,639	610,166	1,356,923				
2010	178,073	584,576	762,649	189,989	15,876	169,029	598,946	1,040,378	71,409	75,908	1,187,694	2,161,533	2,924,182				
2011	146,395	473,044	619,438	169,003	9,285	44,693	273,099	5,767	303,962	7,690	317,418	813,498	1,432,936				
2012	101,126	9,887	111,013	105,018	8,914	8,279	77,187	0	170,584	9,987	180,571	379,969	490,981				
2013	668,704	17,463	686,166	622,576	27,665	12,646	14,748	0	23,117	0	23,117	700,754	1,386,919				
<b>Morzhovoi Bay</b>																	
1988	443,271	427,488	870,759	250,021	243,798	226,440	245,730	83,203	40,178	16,427	139,809	1,105,797	1,976,556				
1989	3,437,005	1,109,760	4,546,762	2,980,895	1,190,046	379,515	118,163	33,555	4,861	0	38,416	4,707,034	9,253,795				
1990	2,137,938	1,047,227	3,185,166	1,504,270	663,567	552,543	197,011	26,108	24,592	1,116	51,816	2,969,207	6,154,372				
1991	1,657,717	478,549	2,136,265	1,318,753	426,210	209,931	57,607	15,554	4,666	0	20,222	2,032,723	4,168,991				
1992	364,692	886,270	1,250,961	193,850	455,384	278,844	207,282	35,947	21,470	949	58,367	1,193,726	2,444,686				
1993	72,436	544,698	617,133	18,974	160,369	414,318	368,297	62,370	63,859	949	127,179	1,089,136	1,706,269				
1994	43,583	284,888	328,470	9,921	62,598	132,027	214,543	7,298	49,193	0	56,491	475,580	804,051				
1996	221,620	107,996	329,616	191,236	22,344	14,475	53,533	5,697	31,185	0	36,882	318,471	648,088				
1997	142,087	103,607	245,694	93,088	79,526	63,074	38,078	6,646	10,622	0	17,267	291,032	536,723				
1998	927,800	1,905,001	2,832,802	372,189	1,244,517	1,545,608	337,411	40,344	81,442	0	121,787	3,621,510	6,454,311				
1999	162,720	506,161	668,880	51,457	287,843	555,624	767,631	66,609	59,158	1,899	127,663	1,790,219	2,459,099				
2000	904,853	872,919	1,777,772	833,624	156,937	384,386	731,583	448,222	107,962	0	556,185	2,662,717	4,440,488				
2001	1,087,232	331,894	1,419,125	664,348	960,195	226,770	237,689	183,362	114,032	11,371	308,764	2,397,768	3,816,893				

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Table 7.–Page 2 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
2002	2,244,692	776,467	3,021,160	1,474,502	1,591,183	843,217	342,149	51,049	171,771	3,104	225,923	4,476,971	7,498,129
2003	581,889	1,727,722	2,309,610	131,908	1,224,831	865,697	442,380	41,603	114,404	0	156,008	2,820,821	5,130,433
2004	365,320	1,833,648	2,198,967	312,690	216,514	1,650,340	2,550,313	294,832	194,497	7,422	496,749	5,226,603	7,425,569
2005	566,624	4,274,817	4,841,442	405,310	158,006	400,612	1,340,751	479,938	229,744	2,848	712,531	3,017,213	7,858,654
2006	17,819,145	2,523,016	20,342,161	17,143,999	601,039	290,068	1,128,281	266,901	293,075	20,416	580,393	19,743,775	40,085,936
2007	11,336,243	2,253,163	13,589,409	7,540,331	6,519,311	1,823,835	2,269,793	533,570	256,958	13,482	804,009	18,957,280	32,546,687
2008	3,876,110	12,176,231	16,052,339	1,133,128	6,152,588	13,677,697	2,020,561	787,999	221,592	45,063	1,054,656	24,038,632	40,090,971
2009	311,582	2,598,751	2,910,333	184,644	543,978	4,494,013	8,839,156	407,590	14,726	16,511	438,828	14,500,615	17,410,946
2010	67,519	2,635,872	2,703,391	58,106	20,657	318,493	2,566,424	5,351,471	123,283	211,852	5,686,604	8,650,280	11,353,670
2011	261,078	1,295,373	1,556,451	278,183	6,447	94,044	890,206	1,527,764	1,842,749	330,040	3,700,552	4,969,432	6,525,884
2012	300,577	918,719	1,219,294	260,365	33,467	20,621	381,928	84,379	1,190,445	126,152	1,400,976	2,097,361	3,316,656
2013	5,608,259	138,871	5,747,128	6,096,428	272,696	49,896	92,885	2,484	536,142	46,928	585,554	7,097,463	12,844,590
<b>Cold Bay/Belkofski Bay</b>													
1988	235,914	315,625	551,537	126,750	206,357	222,054	205,556	85,149	30,562	7,297	123,007	883,727	1,435,264
1989	465,620	55,255	520,876	408,726	54,811	29,721	16,589	3,880	488	0	4,368	514,216	1,035,095
1990	1,813,413	635,880	2,449,293	1,537,291	520,248	275,283	227,225	86,886	50,748	3,646	141,280	2,701,326	5,150,624
1991	603,047	616,997	1,220,045	669,067	135,592	236,400	437,850	76,766	132,755	161	209,682	1,688,596	2,908,642
1992	177,369	170,457	347,825	95,460	109,930	96,700	139,849	39,648	38,435	1,722	79,806	521,742	869,571
1993	100,303	269,849	370,152	68,373	87,199	156,298	137,852	35,906	18,607	434	54,949	504,671	874,823
1994	96,034	220,312	316,345	28,879	54,378	64,115	75,643	27,344	10,265	1,258	38,867	261,884	578,230
1996	339,067	15,338	354,404	266,415	62,717	40,124	30,565	24,165	2,530	201	26,896	426,718	781,121
1997	118,159	12,184	130,341	44,100	59,543	90,588	80,558	37,301	936	483	38,720	313,512	443,853
1998	374,298	149,168	523,466	116,353	270,327	322,267	168,189	49,039	17,618	5,616	72,274	949,415	1,472,881
1999	111,133	78,031	189,162	62,197	58,424	235,743	266,603	59,853	21,247	869	81,968	705,817	894,978
2000	453,965	220,395	674,361	548,118	105,008	264,499	297,586	181,329	16,470	2,811	200,610	1,415,824	2,090,183
2001	990,492	66,837	1,057,329	873,549	142,999	138,379	147,340	89,545	15,002	3,544	108,087	1,410,355	2,467,681
2002	944,644	243,043	1,187,690	501,063	461,919	301,545	194,739	53,613	86,248	2,980	142,841	1,602,107	2,789,799
2003	491,246	245,629	736,875	263,140	313,721	278,557	79,036	0	8,746	1,136	9,883	944,341	1,681,215
2004	621,394	132,352	753,748	419,168	334,351	399,993	193,441	22,926	2,296	0	25,222	1,372,173	2,125,921
2005	975,377	210,419	1,185,797	702,024	284,625	271,704	172,169	22,450	16,203	0	38,654	1,469,174	2,654,972
2006	2,695,898	377,805	3,073,706	2,143,122	447,400	532,736	220,695	25,939	11,424	0	37,363	3,381,315	6,455,019
2007	3,839,198	1,353,230	5,192,429	888,649	1,852,878	725,018	355,917	38,880	869	0	39,749	3,862,209	9,054,639
2008	981,613	3,704,527	4,686,141	187,850	2,031,135	3,731,339	998,148	88,372	69,315	838	158,525	7,106,994	11,793,135
2009	743,106	1,284,279	2,027,384	407,741	260,914	773,553	3,176,359	348,628	28,011	15,097	391,736	5,010,303	7,037,686
2010	265,654	2,623,096	2,888,751	232,437	74,727	340,065	1,407,576	1,366,763	268,720	75,803	1,715,009	3,769,814	6,658,566
2011	487,187	941,238	1,428,426	439,193	60,163	81,593	448,469	70,207	757,309	41,339	868,852	1,898,264	3,326,688
2012	347,973	172,826	520,802	404,294	87,884	160,511	177,551	20,280	189,340	6,096	215,720	1,045,959	1,566,760
2013	3,199,032	43,614	3,242,645	3,083,754	199,129	35,370	94,717	70,597	75,700	2,482	148,779	3,561,751	6,804,396
<b>Pavlof Bay/Volcano Bay</b>													
1988	376,973	786,599	1,163,568	318,312	190,471	408,242	372,043	171,158	59,917	65,874	296,949	1,586,014	2,749,587

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Table 7.–Page 3 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
1989	893,932	1,655,486	2,549,415	562,769	440,202	367,365	441,276	121,330	80,944	17,669	219,941	2,031,560	4,580,977
1990	1,137,606	2,101,129	3,238,738	823,167	573,840	631,119	344,741	61,980	125,646	18,957	206,582	2,579,442	5,818,176
1991	518,066	567,070	1,085,136	473,436	86,044	282,775	278,425	39,282	89,006	3,039	131,329	1,252,012	2,337,143
1992	206,624	387,633	594,256	96,109	162,428	150,644	164,304	32,773	52,064	0	84,837	658,322	1,252,576
1993	115,627	201,552	317,178	71,678	168,723	494,231	230,545	44,417	27,416	1,925	73,756	1,038,931	1,356,106
1994	40,820	123,379	164,198	25,438	50,672	91,919	143,134	54,378	28,337	0	82,715	393,880	558,074
1996	391,490	55,285	446,777	367,494	40,122	31,041	52,308	14,841	9,518	992	25,351	516,312	963,090
1997	70,299	79,454	149,757	31,066	48,448	82,056	53,515	5,404	28,417	949	34,772	249,859	399,614
1998	107,726	176,994	284,719	33,534	150,680	314,200	381,825	8,179	51,664	0	59,844	940,076	1,224,799
1999	51,913	91,936	143,851	44,539	39,952	97,486	128,419	87,932	12,812	0	100,744	411,141	554,990
2000	1,253,314	237,532	1,490,846	1,077,574	188,231	133,448	239,906	85,518	26,684	0	112,203	1,751,363	3,242,209
2001	620,598	220,624	841,220	354,209	300,667	221,047	168,521	49,439	29,570	0	79,010	1,123,456	1,964,674
2002	1,185,009	408,053	1,593,060	1,114,119	319,668	439,759	346,546	41,216	42,859	1,276	85,352	2,305,444	3,898,502
2003	214,279	359,451	573,730	139,469	207,452	486,692	462,063	81,055	92,200	921	174,174	1,469,851	2,043,584
2004	371,131	479,742	850,871	311,594	127,594	648,954	724,374	124,613	258,629	5,795	389,038	2,201,557	3,052,431
2005	1,225,852	335,581	1,561,431	1,164,657	320,170	352,533	443,665	34,456	86,297	0	120,751	2,401,776	3,963,209
2006	3,146,589	353,173	3,499,761	3,047,383	682,097	417,164	286,762	26,793	66,861	1,021	94,674	4,528,078	8,027,842
2007	1,739,492	1,351,581	3,091,074	1,184,516	1,718,846	2,220,531	1,241,244	66,805	122,325	0	189,131	6,554,267	9,645,340
2008	1,529,846	1,655,526	3,185,373	498,055	2,810,675	2,647,935	2,271,487	577,126	30,353	5,468	612,948	8,841,101	12,026,474
2009	1,242,537	2,757,321	3,999,859	939,973	845,010	3,142,344	5,248,535	1,455,859	200,754	31,204	1,687,817	11,863,678	15,863,536
2010	599,463	1,368,673	1,968,136	478,732	385,939	655,577	2,529,296	2,214,666	670,312	39,419	2,924,395	6,973,933	8,942,073
2011	353,509	727,044	1,080,554	362,114	169,661	243,418	1,419,897	169,942	1,444,593	35,341	1,649,874	3,844,968	4,925,520
2012	528,209	358,601	886,814	537,822	51,181	216,673	850,958	36,462	1,370,912	35,836	1,443,208	3,099,842	3,986,660
2013	5,378,895	283,767	5,662,661	5,960,091	762,083	116,195	178,720	36,942	125,238	661	162,841	7,179,926	12,842,588
<b>Beaver Bay/Balboa Bay/Unga Strait</b>													
1988	169,806	150,200	320,005	133,180	70,128	70,525	46,150	13,193	27,038	0	40,231	360,216	680,224
1989	425,562	489,313	914,875	330,329	60,406	52,083	34,258	0	6,059	0	6,059	483,135	1,398,013
1990	374,061	479,216	853,275	384,766	40,078	155,650	89,422	16,442	6,616	0	23,057	692,975	1,546,251
1991	337,523	188,765	526,288	313,050	36,941	56,285	51,490	5,058	1,127	0	6,185	463,950	990,237
1992	73,138	128,906	202,041	80,581	30,327	47,470	20,585	564	2,027	0	2,591	181,556	383,599
1993	9,323	43,753	53,076	16,877	7,062	28,751	29,839	3,164	4,362	0	7,526	90,052	143,127
1994	10,119	29,294	39,414	9,240	4,362	11,328	25,119	2,254	5,938	0	8,192	58,243	97,656
1996	716,832	5,416	722,249	746,235	10,645	9,233	4,541	905	460	0	1,365	772,018	1,494,266
1997	107,308	23,354	130,663	57,536	34,558	4,218	6,682	0	0	0	0	102,995	233,658
1998	116,365	79,537	195,904	88,493	37,608	51,697	5,075	0	0	0	0	182,874	378,779
1999	30,113	59,467	89,578	78,640	10,903	35,551	22,833	685	0	0	685	148,613	238,190
2000	395,113	32,059	427,172	401,441	7,007	19,002	21,063	1,356	1,356	0	2,713	451,226	878,398
2001	795,671	78,698	874,370	856,993	65,118	32,117	16,721	0	0	0	0	970,950	1,845,319
2002	611,008	261,574	872,583	499,072	657,739	350,410	33,171	0	13,343	0	13,343	1,553,737	2,426,319
2003	60,835	238,017	298,853	12,620	108,980	223,498	129,934	7,972	9,746	0	17,717	492,746	791,598

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Table 7.–Page 4 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
2004	212,229	171,614	383,840	256,112	87,019	170,666	132,602	31,546	1,370	685	33,601	679,997	1,063,837
2005	2,048,134	48,615	2,096,750	2,620,901	83,483	38,576	45,137	6,646	0	0	6,646	2,794,743	4,891,490
2006	3,164,401	1,064,115	4,228,516	2,119,653	1,974,847	790,466	382,300	4,029	42,734	0	46,763	5,314,027	9,542,539
2007	624,099	1,229,228	1,853,329	522,535	1,453,943	1,229,576	419,643	20,177	2,295	1,148	23,619	3,649,317	5,502,643
2008	777,292	2,560,319	3,337,611	367,734	1,896,414	2,201,529	1,012,410	105,951	2,855	0	108,806	5,586,895	8,924,505
2009	400,925	2,050,416	2,451,338	284,555	386,879	836,604	1,249,505	621,030	108,723	949	730,703	3,488,249	5,939,590
2010	63,693	754,381	818,074	34,435	67,375	213,381	379,420	85,243	120,499	1,715	207,456	902,066	1,720,139
2011	113,221	328,115	441,336	95,875	18,170	78,304	298,352	21,467	161,175	0	182,643	673,345	1,114,681
2012	46,272	130,668	176,939	32,533	1,634	42,697	390,550	8,928	261,823	0	270,751	738,167	915,105
2013	1,661,642	110,359	1,772,002	1,544,494	51,703	21,890	42,280	0	12,735	0	12,735	1,673,102	3,445,102
<b>West Nagai Strait</b>													
1989	266,891	202,991	469,881	310,200	137,896	71,670	23,766	2,101	5,384	0	7,485	551,017	1,020,898
1990	223,997	36,745	260,741	228,844	17,172	17,328	5,914	0	908	0	908	270,167	530,907
1991	212,475	24,806	237,280	236,403	6,002	6,002	18,007	3,813	0	0	3,813	270,227	507,507
1992	24,726	33,234	57,961	13,307	8,516	19,136	8,256	0	3,165	0	3,165	52,379	110,340
1993	19,404	4,835	24,239	16,141	9,945	74,494	14,798	908	0	0	908	116,286	140,526
1994	20,348	24,860	45,209	8,616	24,859	29,969	27,773	8,469	0	0	8,469	99,682	144,891
1996	50,748	4,706	55,454	40,628	7,431	16,596	20,149	0	908	0	908	85,713	141,166
1997	334,024	263,782	597,804	180,259	292,165	173,398	25,182	0	4,706	0	4,706	675,708	1,273,510
1998	79,789	104,053	183,843	34,977	94,673	152,269	54,389	3,761	760	0	4,520	340,829	524,671
1999	59,602	24,684	84,286	46,816	34,194	28,481	46,396	5,615	0	0	5,615	161,501	245,786
2000	324,383	24,281	348,664	368,761	5,425	5,696	18,988	5,615	1,899	0	7,513	406,383	755,045
2001	509,223	69,773	578,994	349,814	126,647	65,816	33,598	908	0	0	908	576,783	1,155,776
2002	184,778	128,229	313,008	84,584	92,106	302,759	104,534	4,747	0	0	4,747	588,730	901,736
2003	40,103	57,642	97,744	7,611	60,133	37,806	11,146	3,798	0	0	3,798	120,492	218,233
2004	36,866	92,662	129,526	33,098	11,393	59,786	46,150	12,301	1,899	0	14,199	164,626	294,151
2005	411,853	47,535	459,387	476,009	14,241	38,507	70,970	11,106	0	0	11,106	610,831	1,070,218
2006	1,148,697	124,196	1,272,893	854,456	606,163	157,389	115,801	908	2,725	0	3,633	1,737,444	3,010,339
2007	1,118,132	2,410,737	3,528,868	405,215	1,713,276	1,257,497	435,630	27,634	41,115	0	68,749	3,880,362	7,409,230
2008	846,719	6,907,176	7,753,897	305,218	1,875,051	2,683,702	1,203,088	60,456	42,677	0	103,134	6,170,191	13,924,087
2009	332,212	9,727,714	10,059,926	100,916	1,334,472	3,060,897	3,281,452	544,344	87,282	11,779	643,406	8,421,140	18,481,065
2010	191,580	3,329,836	3,521,417	149,959	169,021	1,027,531	2,135,083	1,355,030	192,369	26,083	1,573,480	5,055,073	8,576,492
2011	30,611	580,303	610,913	62,024	23,340	241,966	722,267	77,027	183,126	9,513	269,662	1,319,260	1,930,171
2012	66,031	191,917	257,947	134,778	9,128	55,834	527,604	39,306	584,623	17,486	641,414	1,368,757	1,626,704
2013	1,686,159	79,541	1,765,700	1,560,993	80,087	55,057	203,412	3,798	99,873	0	103,671	2,003,215	3,768,915
<b>Stepovak Bay</b>													
1989	352,599	129,844	482,443	308,147	19,700	18,217	4,025	0	0	0	0	350,088	832,534
1990	842,468	138,655	981,124	940,262	7,256	28,930	19,636	8,266	6,158	0	14,424	1,010,509	1,991,629
1991	225,164	24,115	249,280	273,356	8,175	30,978	13,539	0	8,171	0	8,171	334,220	583,500
1992	286,230	26,900	313,131	255,298	7,249	31,206	7,801	2,013	0	0	2,013	303,568	616,698

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Table 7.–Page 5 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
1993	27,147	4,177	31,324	35,652	2,013	5,092	4,025	0	3,079	0	3,079	49,860	81,186
1994	30,461	2,013	32,474	32,303	0	0	0	0	0	0	0	32,303	64,776
1996	158,463	0	158,463	158,925	6,038	2,013	6,038	0	0	0	0	173,013	331,475
1997	25,774	18,114	43,888	67,372	40,254	14,089	0	0	2,013	0	2,013	123,727	167,616
1998	51,013	2,013	53,025	54,274	2,013	4,025	0	0	0	0	0	60,312	113,338
1999	40,454	8,051	48,505	58,559	0	4,025	8,051	0	0	0	0	70,635	119,140
2000	232,994	2,013	235,006	226,019	0	4,025	0	0	0	0	0	230,044	465,050
2001	479,137	0	479,137	466,342	29,292	0	0	0	0	0	0	495,636	974,772
2002	54,541	51,584	106,125	124,148	29,043	11,144	2,875	0	0	0	0	167,208	273,333
2003	57,982	6,038	64,020	65,336	10,063	14,089	4,955	0	0	0	0	94,444	158,465
2004	173,486	17,108	190,595	160,526	22,827	11,070	6,038	6,038	2,013	0	8,051	208,514	399,108
2005	419,167	101,564	520,730	515,631	11,022	13,083	20,127	6,038	0	0	6,038	565,901	1,086,631
2006	1,570,436	23,836	1,594,272	1,770,730	334,849	199,131	19,337	4,834	0	0	4,834	2,328,881	3,923,152
2007	370,600	203,449	574,048	478,146	348,853	192,724	59,862	5,701	0	0	5,701	1,085,283	1,659,333
2008	180,653	45,662	226,317	193,836	138,601	126,295	191,624	41,104	0	2,228	43,332	693,687	920,003
2009	55,241	20,290	75,532	60,636	164,796	312,245	141,401	105,943	835	0	106,778	785,858	861,391
2010	53,473	8,911	62,384	46,215	6,616	48,127	60,199	32,485	4,025	0	36,510	197,666	260,050
2011	121,056	5,790	126,846	138,324	4,337	3,272	7,578	0	4,531	0	4,531	158,042	284,887
2012	144,038	7,734	151,773	188,271	1,007	6,461	18,489	0	3,020	0	3,020	217,247	369,019
2013	542,681	7,045	549,726	533,981	9,213	2,701	6,038	0	0	0	0	551,934	1,101,659
<b>WESTERN SECTION TOTALS</b>													
1988	679,185	743,113	1,422,296	376,771	450,155	448,494	451,286	168,352	70,740	23,724	262,816	1,989,522	3,411,820
1989	4,943,679	1,282,274	6,225,952	4,506,959	1,268,782	440,755	199,986	44,271	5,349	0	49,620	6,466,102	12,692,056
1990	4,554,561	1,785,640	6,340,201	3,498,025	1,266,499	881,321	447,021	112,994	75,340	4,762	193,096	6,285,962	12,626,165
1991	2,734,845	1,123,944	3,858,788	2,476,924	593,914	480,509	495,457	92,320	137,421	161	229,904	4,276,706	8,135,503
1992	915,258	1,097,741	2,012,996	574,981	609,959	422,171	350,929	75,595	59,905	2,671	138,173	2,096,211	4,109,204
1993	509,955	833,680	1,343,633	347,913	278,147	608,026	516,148	98,276	82,466	1,383	182,128	1,932,359	3,275,990
1994	227,465	574,213	801,674	150,856	130,390	214,943	310,010	34,642	59,458	1,258	95,358	901,557	1,703,231
1996	1,139,976	257,621	1,397,598	891,550	138,539	84,069	120,466	29,862	33,715	201	63,778	1,298,402	2,695,997
1997	365,138	169,200	534,334	216,834	214,633	191,899	135,816	43,947	11,558	483	55,987	815,167	1,349,497
1998	1,589,341	2,455,657	4,044,997	878,131	1,596,334	1,993,566	569,541	89,383	99,060	5,616	194,061	5,231,635	9,276,629
1999	361,998	678,919	1,040,915	169,431	351,310	836,064	1,054,752	126,462	80,405	2,768	209,631	2,622,071	3,662,983
2000	1,965,424	1,278,820	3,244,244	1,944,914	321,593	743,027	1,061,949	629,551	126,954	2,811	759,317	4,830,803	8,075,041
2001	2,991,993	530,363	3,522,355	2,328,858	1,159,761	447,477	502,001	277,950	129,034	14,915	421,894	4,859,994	8,382,345
2002	3,918,042	2,037,370	5,955,416	2,697,164	2,327,855	1,367,458	640,662	104,662	268,826	6,084	379,571	7,412,705	13,368,120
2003	1,322,942	2,366,089	3,689,030	602,377	1,622,652	1,366,577	645,906	41,603	133,236	1,136	175,977	4,413,487	8,102,517
2004	1,712,486	2,167,245	3,879,731	1,396,174	654,670	2,108,290	2,750,428	317,758	196,793	7,422	521,971	7,431,527	11,311,257
2005	1,806,850	4,614,796	6,421,647	1,327,098	528,585	733,491	1,512,920	502,388	245,947	2,848	751,185	4,853,276	11,274,923
2006	23,727,009	2,966,168	26,693,181	22,251,643	1,106,783	907,052	1,365,950	292,840	304,499	20,416	617,756	26,249,176	52,942,355
2007	19,596,721	5,585,008	25,181,733	12,153,216	9,058,601	2,794,498	2,724,422	572,450	257,827	13,482	843,758	27,574,493	52,756,226

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Table 7.–Page 6 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
2008	5,051,132	17,765,290	22,816,421	2,197,021	10,028,126	17,739,676	3,053,416	876,371	290,907	45,901	1,213,181	34,231,418	57,047,839
2009	1,132,030	4,552,445	5,684,475	690,350	999,869	5,503,778	12,076,889	773,293	45,300	31,608	850,203	20,121,084	25,805,555
2010	511,246	5,843,544	6,354,791	480,532	111,260	827,587	4,572,946	7,758,612	463,412	363,563	8,589,307	14,581,627	20,936,418
2011	894,660	2,709,655	3,604,315	886,379	75,895	220,330	1,611,774	1,603,738	2,904,020	379,069	4,886,822	7,681,194	11,285,508
2012	749,676	1,101,432	1,851,109	769,677	130,265	189,411	636,666	104,659	1,550,369	142,235	1,797,267	3,523,289	5,374,397
2013	9,475,995	199,948	9,675,939	9,802,758	499,490	97,912	202,350	73,081	634,959	49,410	757,450	11,359,968	21,035,905
<b>EASTERN SECTION TOTALS</b>													
1988	546,779	936,799	1,483,573	451,492	260,599	478,767	418,193	184,351	86,955	65,874	337,180	1,946,230	3,429,811
1989	1,938,984	2,477,634	4,416,614	1,511,445	658,204	509,335	503,325	123,431	92,387	17,669	233,485	3,415,800	7,832,422
1990	2,578,132	2,755,745	5,333,878	2,377,039	638,346	833,027	459,713	86,688	139,328	18,957	244,971	4,553,093	9,886,963
1991	1,293,228	804,756	2,097,984	1,296,245	137,162	376,040	361,461	48,153	98,304	3,039	149,498	2,320,409	4,418,387
1992	590,718	576,673	1,167,389	445,295	208,520	248,456	200,946	35,350	57,256	0	92,606	1,195,825	2,363,213
1993	171,501	254,317	425,817	140,348	187,743	602,568	279,207	48,489	34,857	1,925	85,269	1,295,129	1,720,945
1994	101,748	179,546	281,295	75,597	79,893	133,216	196,026	65,101	34,275	0	99,376	584,108	865,397
1996	1,317,533	65,407	1,382,943	1,313,282	64,236	58,883	83,036	15,746	10,886	992	27,624	1,547,056	2,929,997
1997	537,405	384,704	922,112	336,233	415,425	273,761	85,379	5,404	35,136	949	41,491	1,152,289	2,074,398
1998	354,893	362,597	717,491	211,278	284,974	522,191	441,289	11,940	52,424	0	64,364	1,524,091	2,241,587
1999	182,082	184,138	366,220	228,554	85,049	165,543	205,699	94,232	12,812	0	107,044	791,890	1,158,106
2000	2,205,804	295,885	2,501,688	2,073,795	200,663	162,171	279,957	92,489	29,939	0	122,429	2,839,016	5,340,702
2001	2,404,629	369,095	2,773,721	2,027,358	521,724	318,980	218,840	50,347	29,570	0	79,918	3,166,825	5,940,541
2002	2,035,336	849,440	2,884,776	1,821,923	1,098,556	1,104,072	487,126	45,963	56,202	1,276	103,442	4,615,119	7,499,890
2003	373,199	661,148	1,034,347	225,036	386,628	762,085	608,098	92,825	101,946	921	195,689	2,177,533	3,211,880
2004	793,712	761,126	1,554,832	761,330	248,833	890,476	909,164	174,498	263,911	6,480	444,889	3,254,694	4,809,527
2005	4,105,006	533,295	4,638,298	4,777,198	428,916	442,699	579,899	58,246	86,297	0	144,541	6,373,251	11,011,548
2006	9,030,123	1,565,320	10,595,442	7,792,222	3,597,956	1,564,150	804,200	36,564	112,320	1,021	149,904	13,908,430	24,503,872
2007	3,852,323	5,194,995	9,047,319	2,590,412	5,234,918	4,900,328	2,156,379	120,317	165,735	1,148	287,200	15,169,229	24,216,546
2008	3,334,510	11,168,683	14,503,198	1,364,843	6,720,741	7,659,461	4,678,609	784,637	75,885	7,696	868,220	21,291,874	35,795,069
2009	2,030,915	14,555,741	16,586,655	1,386,080	2,731,157	7,352,090	9,920,893	2,727,176	397,594	43,932	3,168,704	24,558,925	41,145,582
2010	908,209	5,461,801	6,370,011	709,341	628,951	1,944,616	5,103,998	3,687,424	987,205	67,217	4,741,841	13,128,738	19,498,754
2011	618,397	1,641,252	2,259,649	658,337	215,508	566,960	2,448,094	268,436	1,793,425	44,854	2,106,710	5,995,615	8,255,259
2012	784,550	688,920	1,473,473	893,404	62,950	321,665	1,787,601	84,696	2,220,378	53,322	2,358,393	5,424,013	6,897,488
2013	9,269,377	480,712	9,750,089	9,599,559	903,086	195,843	430,450	40,740	237,846	661	279,247	11,408,177	21,158,264
<b>SOUTH PENINSULA DISTRICT TOTALS</b>													
1988	1,227,389	1,679,912	2,907,294	830,400	710,754	927,261	871,197	353,415	157,695	89,598	600,708	3,940,322	6,847,624
1989	6,882,663	3,759,908	10,642,566	6,018,404	1,926,986	950,090	703,311	167,702	97,736	17,669	283,105	9,881,901	20,524,478
1990	7,132,693	4,541,385	11,674,079	5,875,064	1,904,845	1,714,348	906,734	199,682	214,668	23,719	438,067	10,839,053	22,513,128
1991	4,028,073	1,928,700	5,956,772	3,773,169	731,076	856,549	856,918	140,473	235,725	3,200	379,402	6,597,120	12,553,890
1992	1,505,976	1,674,414	3,180,385	1,020,276	818,479	670,627	551,875	110,945	117,161	2,671	230,779	3,292,031	6,472,417
1993	681,456	1,087,997	1,769,450	488,261	465,890	1,210,594	795,355	146,765	117,323	3,308	267,397	3,227,485	4,996,935
1994	329,213	753,759	1,082,969	226,453	210,283	348,159	506,036	99,743	93,733	1,258	194,734	1,485,665	2,568,628

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Table 7.–Page 7 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
1996	2,457,509	323,028	2,780,541	2,204,832	202,775	142,952	203,502	45,608	44,601	1,193	91,402	2,845,456	5,625,994
1997	902,543	553,904	1,456,446	553,067	630,058	465,660	221,195	49,351	46,694	1,432	97,478	1,967,456	3,423,895
1998	1,944,234	2,818,254	4,762,488	1,089,409	1,881,308	2,515,757	1,010,830	101,323	151,484	5,616	258,425	6,755,726	11,518,216
1999	544,080	863,057	1,407,135	397,985	436,359	1,001,607	1,260,451	220,694	93,217	2,768	316,675	3,413,961	4,821,089
2000	4,171,228	1,574,705	5,745,932	4,018,709	522,256	905,198	1,341,906	722,040	156,893	2,811	881,746	7,669,819	13,415,743
2001	5,396,622	899,458	6,296,076	4,356,216	1,681,485	766,457	720,841	328,297	158,604	14,915	501,812	8,026,819	14,322,886
2002	5,953,378	2,886,810	8,840,192	4,519,087	3,426,411	2,471,530	1,127,788	150,625	325,028	7,360	483,013	12,027,824	20,868,010
2003	1,696,141	3,027,237	4,723,377	827,413	2,009,280	2,128,662	1,254,004	134,428	235,182	2,057	371,666	6,591,020	11,314,397
2004	2,506,198	2,928,371	5,434,563	2,157,504	903,503	2,998,766	3,659,592	492,256	460,704	13,902	966,860	10,686,221	16,120,784
2005	5,911,856	5,148,091	11,059,945	6,104,296	957,501	1,176,190	2,092,819	560,634	332,244	2,848	895,726	11,226,527	22,286,471
2006	32,757,132	4,531,488	37,288,623	30,043,865	4,704,739	2,471,202	2,170,150	329,404	416,819	21,437	767,660	40,157,606	77,446,227
2007	23,449,044	10,780,003	34,229,052	14,743,628	14,293,519	7,694,826	4,880,801	692,767	423,562	14,630	1,130,958	42,743,722	76,972,772
2008	8,385,642	28,933,973	37,319,619	3,561,864	16,748,867	25,399,137	7,732,025	1,661,008	366,792	53,597	2,081,401	55,523,292	92,842,908
2009	3,162,945	19,108,186	22,271,130	2,076,430	3,731,026	12,855,868	21,997,782	3,500,469	442,894	75,540	4,018,907	44,680,009	66,951,137
2010	1,419,455	11,305,345	12,724,802	1,189,873	740,211	2,772,203	9,676,944	11,446,036	1,450,617	430,780	13,331,148	27,710,365	40,435,172
2011	1,513,057	4,350,907	5,863,964	1,544,716	291,403	787,290	4,059,868	1,872,174	4,697,445	423,923	6,993,532	13,676,809	19,540,767
2012	1,534,226	1,790,352	3,324,582	1,663,081	193,215	511,076	2,424,267	189,355	3,770,747	195,557	4,155,660	8,947,302	12,271,885
2013	18,745,372	680,660	19,426,028	19,402,317	1,402,576	293,755	632,800	113,821	872,805	50,071	1,036,697	22,768,145	42,194,169
<b>CHIGNIK DISTRICT</b>													
<b>Ivanof Bay</b>													
1989	375,317	142,361	517,678	402,553	74,048	403,346	380,328	175,484	6,289	6,289	188,062	1,448,335	1,966,013
1990	760,011	17,004	777,016	899,720	10,616	59,070	132,651	55,200	0	0	55,200	1,157,258	1,934,273
1991	361,655	1,476	363,131	350,368	0	0	1,723	7,136	0	738	7,874	359,965	723,096
1992	32,735	2,215	34,949	37,543	1,969	984	5,028	4,119	1,889	738	6,746	52,271	87,220
1993	55,400	1,929	57,329	28,729	41,776	9,880	3,055	0	699	0	699	84,139	141,467
1994	44,185	12,095	56,280	13,569	22,612	12,866	3,833	984	246	0	1,230	54,109	110,391
1995	60,450	3,833	64,283	72,814	2,848	492	2,461	2,707	492	0	3,199	81,814	146,097
1996	72,589	699	73,288	73,697	41,649	6,890	7,872	8,754	0	0	8,754	138,863	212,150
1997	40,248	4,675	44,923	56,022	4,595	7,770	4,183	3,691	492	246	4,429	77,000	121,924
1998	27,874	1,191	29,065	40,904	1,864	246	1,230	1,723	0	0	1,723	45,966	75,031
1999	58,134	3,652	61,784	61,575	492	1,476	9,919	10,089	945	0	11,034	84,495	146,280
2000	920,897	15,177	936,075	1,178,257	37,727	25,900	15,503	10,089	945	246	11,280	1,268,668	2,204,742
2001	783,211	97,341	880,550	620,710	325,720	73,445	43,541	2,848	15,299	0	18,147	1,081,562	1,962,112
2002	394,160	75,085	469,246	281,883	1,430,141	482,812	119,398	4,490	9,228	0	13,718	2,327,954	2,797,199
2003	39,742	243,170	282,912	14,904	50,330	98,784	111,788	28,954	7,990	0	36,945	312,751	595,663
2004	78,301	451,280	529,581	120,337	36,480	444,150	681,583	217,943	36,389	6,354	260,686	1,543,236	2,072,818
2005	663,287	907,178	1,570,465	947,259	55,244	86,930	225,662	56,910	51,450	1,182	109,541	1,424,638	2,995,105
2006	9,275,500	343,120	9,618,621	12,000,574	1,751,915	125,603	230,592	53,504	112,773	46,687	212,964	14,321,648	23,940,270
2007	2,590,248	186,057	2,776,306	2,619,492	1,693,768	325,392	70,091	16,935	25,403	3,629	45,967	4,754,711	7,531,016
2008	1,270,167	794,362	2,064,529	690,097	2,471,293	1,393,829	272,918	12,249	12,249	4,083	28,581	4,856,718	6,921,246

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Table 7.–Page 8 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
2009	167,512	1,812,620	1,980,132	99,103	731,233	2,266,419	1,362,266	94,708	31,535	2,515	128,759	4,587,782	6,567,914
2010	12,542	497,841	510,383	17,818	24,005	892,163	2,124,920	610,730	203,185	7,312	821,228	3,880,132	4,390,515
2011	147,210	158,875	306,083	170,043	0	40,008	525,781	437,307	248,170	39,561	725,036	1,460,866	1,766,948
2012	236,248	50,634	286,883	280,465	3,231	9,254	71,965	12,854	27,679	0	40,532	405,448	692,329
2013	3,891,387	150,543	4,041,930	4,723,851	28,213	29,844	504,305	0	441,530	19,189	460,719	5,746,931	9,788,861
<b>Mitrofania Island</b>													
1989	170,450	510,311	680,761	163,434	152,639	637,889	315,908	42,526	17,719	21,263	81,508	1,351,378	2,032,138
1990	269,281	40,104	309,384	218,188	141,813	173,574	214,823	75,473	22,789	5,717	103,980	852,379	1,161,765
1991	440,867	42,474	483,341	409,897	107,657	67,876	52,191	46,473	5,064	2,532	54,071	691,692	1,175,034
1992	290,955	6,874	297,829	219,423	36,768	6,451	14,621	17,153	0	2,532	19,685	296,948	594,779
1993	133,718	17,869	151,588	76,189	68,542	37,635	15,337	18,459	9,048	653	28,160	225,862	377,448
1994	48,370	8,681	57,052	32,122	19,977	14,992	6,149	13,384	2,532	0	15,916	89,157	146,209
1995	221,670	39,309	260,980	258,696	13,476	46,293	32,346	27,261	0	2,532	29,793	380,603	641,581
1997	545,275	129,834	675,109	356,506	832,433	412,231	101,306	8,229	25,322	10,129	43,680	1,746,159	2,421,267
1998	235,431	283,845	519,277	161,546	177,977	230,585	88,287	25,342	31,019	0	56,360	714,757	1,234,033
1999	172,648	78,335	250,984	162,641	81,213	66,349	83,378	17,305	3,165	3,165	23,636	417,221	668,204
2000	884,331	134,935	1,019,267	877,395	104,618	86,768	84,651	92,390	14,832	66,560	173,781	1,327,210	2,346,477
2001	536,782	326,224	863,006	515,856	258,191	308,027	118,323	43,225	36,561	8,441	88,228	1,288,625	2,151,633
2002	732,541	394,467	1,127,008	716,939	883,121	1,126,100	339,861	34,181	7,504	1,282	42,968	3,108,993	4,235,998
2003	225,828	242,297	468,123	118,906	644,742	615,597	341,453	22,552	46,724	7,597	76,872	1,797,573	2,265,697
2004	949,424	261,894	1,211,320	967,123	204,818	916,975	675,599	163,810	29,328	5,064	198,202	2,962,717	4,174,037
2005	2,039,144	136,680	2,175,825	2,016,881	346,413	172,248	237,391	75,021	20,845	3,284	99,152	2,872,089	5,047,914
2006	4,541,695	280,072	4,821,770	4,124,071	666,002	262,359	275,457	20,960	62,795	0	83,756	5,411,644	10,233,414
2007	2,200,793	631,391	2,832,184	1,979,957	2,151,128	702,542	128,026	5,758	20,059	3,798	29,616	4,991,268	7,823,453
2008	2,825,623	622,685	3,448,309	2,112,695	3,355,896	2,889,523	644,998	47,258	9,851	4,925	62,034	9,065,146	12,513,456
2009	580,893	1,266,391	1,847,284	580,035	3,767,888	4,985,349	1,928,330	196,679	8,336	0	205,015	11,466,620	13,313,905
2010	219,314	1,049,897	1,269,213	119,650	277,853	1,898,318	3,447,284	1,327,154	118,085	16,798	1,462,038	7,205,144	8,474,357
2011	237,140	536,031	773,174	178,188	18,517	188,252	1,697,853	1,160,577	465,170	57,646	1,683,393	3,766,204	4,539,375
2012	276,916	130,157	407,074	279,396	19,622	56,757	535,029	109,430	371,650	9,827	490,908	1,381,712	1,788,790
2013	3,411,503	17,056	3,428,559	3,683,568	157,361	33,359	312,343	10,781	199,302	16,500	226,583	4,413,213	7,841,770
<b>Chignik Bay</b>													
1989	672,318	450,164	1,122,480	660,273	89,797	81,938	174,032	40,550	13,229	0	53,781	1,059,818	2,182,299
1990	1,650,409	423,975	2,074,381	1,330,659	111,829	133,701	444,782	83,477	77,931	1,387	162,795	2,183,761	4,258,145
1991	1,119,262	486,770	1,606,032	1,065,393	98,760	48,865	131,639	67,386	66,421	0	133,807	1,478,466	3,084,498
1992	1,150,084	323,333	1,473,417	1,307,665	91,362	69,122	34,071	0	14,828	0	14,828	1,517,049	2,990,466
1993	823,019	216,260	1,039,276	790,571	467,458	307,174	186,927	22,191	60,687	3,286	86,164	1,838,291	2,877,568
1994	235,449	135,863	371,312	72,103	520,863	514,183	143,524	28,567	32,315	949	61,831	1,312,506	1,683,817
1995	173,572	93,531	267,103	206,860	3,191	52,923	174,184	82,082	14,528	0	96,610	533,768	800,871
1996	1,007,658	128,777	1,136,437	995,236	34,926	44,796	249,658	263,871	72,615	0	336,486	1,661,101	2,797,540

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Table 7.–Page 9 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
1997	1,125,527	334,727	1,460,254	1,020,377	270,496	167,558	237,471	150,392	77,359	5,366	233,117	1,929,012	3,389,266
1998	427,674	626,554	1,054,229	292,560	187,095	243,304	230,117	45,704	91,685	1,213	138,602	1,091,676	2,145,904
1999	628,224	146,209	774,435	471,690	307,845	353,425	431,851	144,268	165,100	0	309,366	1,874,175	2,648,607
2000	3,145,891	433,733	3,579,623	2,800,331	1,657,007	793,849	546,024	224,130	182,700	10,414	417,246	6,214,459	9,794,079
2001	2,232,040	488,212	2,720,253	922,700	2,819,622	841,521	416,754	217,593	48,659	2,554	268,807	5,269,403	7,989,658
2002	274,304	697,209	971,510	112,370	434,936	1,001,961	641,173	86,382	361,373	7,856	455,612	2,646,050	3,617,564
2003	136,009	497,809	633,819	116,352	120,965	345,914	466,463	70,510	132,708	7,476	210,693	1,260,385	1,894,203
2004	937,790	577,337	1,515,126	842,966	360,190	265,548	558,334	288,476	167,489	7,555	463,520	2,490,559	4,005,686
2005	1,020,682	440,895	1,461,578	1,040,778	375,038	638,701	514,913	112,435	84,155	1,618	198,208	2,767,634	4,229,208
2006	1,957,789	433,101	2,390,888	2,664,297	187,986	238,972	372,015	70,627	93,625	2,654	166,905	3,630,177	6,021,064
2007	776,439	768,987	1,545,426	775,260	439,435	585,328	468,728	105,851	39,291	1,898	147,042	2,415,789	3,961,215
2008	1,436,888	435,709	1,872,597	1,107,740	889,415	932,201	686,717	141,205	43,906	2,569	187,681	3,803,748	5,676,347
2009	1,560,769	602,988	2,163,756	961,854	1,050,025	1,097,366	1,024,446	332,197	43,429	9,522	385,148	4,518,836	6,682,593
2010	342,314	594,155	936,470	362,479	351,726	829,040	1,431,076	767,292	698,850	31,965	1,498,106	4,472,427	5,408,896
2011	787,519	131,274	918,795	949,541	17,135	162,285	594,740	137,255	483,314	47,611	668,181	2,391,880	3,310,673
2012	988,581	127,043	1,115,623	1,131,070	15,244	36,162	198,926	58,438	181,033	5,330	244,801	1,626,202	2,741,823
2013	4,845,806	64,622	4,910,427	6,564,328	110,315	30,560	65,224	1,941	72,173	0	74,114	6,844,538	11,754,968
<b>Kujulik Bay</b>													
1989	82,372	13,089	95,460	77,913	772	9,150	11,387	931	0	0	931	100,154	195,613
1990	331,331	78,499	409,830	332,971	1,691	7,737	7,189	1,519	0	0	1,519	351,106	760,935
1991	8,256	949	9,205	14,470	0	0	0	0	0	0	0	14,470	23,675
1992	108,457	18,988	127,445	129,875	760	760	3,038	0	1,519	0	1,519	135,951	263,395
1993	107,647	16,184	123,831	100,150	81,074	29,658	1,367	0	0	0	0	212,249	336,080
1994	7,736	3,190	10,926	9,141	7,321	4,952	6,472	0	2,279	0	2,279	30,165	41,092
1995	851	28,922	29,772	2,772	0	911	456	0	0	0	0	4,139	33,911
1996	231,502	7,595	239,097	188,333	0	0	0	0	0	0	0	188,333	427,430
1997	49,589	61,537	111,127	63,018	456	3,711	14,105	0	5,425	0	5,425	86,714	197,841
1998	39,289	15,190	54,479	38,304	0	2,279	3,798	0	760	0	760	45,140	99,621
1999	92,824	0	92,824	88,526	456	0	0	0	456	0	456	89,438	182,262
2000	221,879	949	222,829	262,224	1,307	0	0	0	0	0	0	263,530	486,360
2001	188,570	0	188,570	213,511	760	2,640	0	931	0	0	931	217,843	406,411
2002	15,870	844	16,714	16,479	6,179	7,689	3,376	844	0	0	844	34,567	51,281
2003	374,933	0	374,933	451,837	949	0	0	0	0	0	0	452,786	827,719
2004	301,691	0	301,691	350,645	9,547	2,278	949	0	0	0	0	363,420	665,112
2005	159,269	0	159,269	150,081	4,093	2,318	0	0	0	0	0	156,492	315,762
2006	518,134	949	519,083	806,820	1,801	851	0	0	0	0	0	809,472	1,328,555
2007	136,283	0	136,283	161,879	2,157	0	0	0	0	0	0	164,036	300,316
2008	423,344	3,209	426,554	447,326	9,874	8,240	26,431	9,661	0	456	10,117	501,987	928,541
2009	268,389	188,399	456,788	159,418	192,790	230,002	93,902	10,175	0	0	10,175	686,287	1,143,076
2010	45,087	122,319	167,405	30,116	83,769	290,322	307,962	33,108	1,519	0	34,627	746,797	914,202

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Table 7.–Page 10 of 10.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	>165 mm			
2011	91,200	12,818	104,020	87,367	456	8,811	35,888	6,205	10,896	0	17,100	149,623	253,642
2012	168,540	32,523	201,063	200,264	3,038	7,383	25,155	0	9,114	0	9,114	244,954	446,017
2013	554,649	15,172	569,822	727,766	32,736	6,916	6,646	0	3,798	0	3,798	777,861	1,347,682
<b>CHIGNIK DISTRICT TOTALS</b>													
1989	1,300,457	1,115,925	2,416,379	1,304,173	317,256	1,132,323	881,655	259,491	37,237	27,552	324,282	3,959,685	6,376,063
1990	3,011,032	559,582	3,570,611	2,781,538	265,949	374,082	799,445	215,669	100,720	7,104	323,494	4,544,504	8,115,118
1991	1,930,040	531,669	2,461,709	1,840,128	206,417	116,741	185,553	120,995	71,485	3,270	195,752	2,544,593	5,006,303
1992	1,582,231	351,410	1,933,640	1,694,506	130,859	77,317	56,758	21,272	18,236	3,270	42,778	2,002,219	3,935,860
1993	1,119,784	252,242	1,372,024	995,639	658,850	384,347	206,686	40,650	70,434	3,939	115,023	2,360,541	3,732,563
1994	335,740	159,829	495,570	126,935	570,773	546,993	159,978	42,935	37,372	949	81,256	1,485,937	1,981,509
1995	456,543	165,595	622,138	541,142	19,515	100,619	209,447	112,050	15,020	2,532	129,602	1,000,324	1,622,460
1996	1,311,749	137,071	1,448,822	1,257,266	76,575	51,686	257,530	272,625	72,615	0	345,240	1,988,297	3,437,120
1997	1,760,639	530,773	2,291,413	1,495,923	1,107,980	591,270	357,065	162,312	108,598	15,741	286,651	3,838,885	6,130,298
1998	730,268	926,780	1,657,050	533,314	366,936	476,414	323,432	72,769	123,464	1,213	197,445	1,897,539	3,554,589
1999	951,830	228,196	1,180,027	784,432	390,006	421,250	525,148	171,662	169,666	3,165	344,492	2,465,329	3,645,353
2000	5,172,998	584,794	5,757,794	5,118,207	1,800,659	906,517	646,178	326,609	198,477	77,220	602,307	9,073,867	14,831,658
2001	3,740,603	911,777	4,652,379	2,272,777	3,404,293	1,225,633	578,618	264,597	100,519	10,995	376,113	7,857,433	12,509,814
2002	1,416,875	1,167,605	2,584,478	1,127,671	2,754,377	2,618,562	1,103,808	125,897	378,105	9,138	513,142	8,117,564	10,702,042
2003	776,512	983,276	1,759,787	701,999	816,986	1,060,295	919,704	122,016	187,422	15,073	324,510	3,823,495	5,583,282
2004	2,267,206	1,290,511	3,557,718	2,281,071	611,035	1,628,951	1,916,465	670,229	233,206	18,973	922,408	7,359,932	10,917,653
2005	3,882,382	1,484,753	5,367,137	4,154,999	780,788	900,197	977,966	244,366	156,450	6,084	406,901	7,220,853	12,587,989
2006	16,293,118	1,057,242	17,350,362	19,595,762	2,607,704	627,785	878,064	145,091	269,193	49,341	463,625	24,172,941	41,523,303
2007	5,703,763	1,586,435	7,290,199	5,536,588	4,286,488	1,613,262	666,845	128,544	84,753	9,325	222,625	12,325,804	19,616,000
2008	5,956,022	1,855,965	7,811,989	4,357,858	6,726,478	5,223,793	1,631,064	210,373	66,006	12,033	288,413	18,227,599	26,039,590
2009	2,577,563	3,870,398	6,447,960	1,800,410	5,741,936	8,579,136	4,408,944	633,759	83,300	12,037	729,097	21,259,525	27,707,488
2010	619,257	2,264,212	2,883,471	530,063	737,353	3,909,843	7,311,242	2,738,284	1,021,639	56,075	3,815,999	16,304,500	19,187,970
2011	1,263,069	838,998	2,102,072	1,385,139	36,108	399,356	2,854,262	1,741,344	1,207,550	144,818	3,093,710	7,768,573	9,870,638
2012	1,670,285	340,357	2,010,643	1,891,195	41,135	109,556	831,075	180,722	589,476	15,157	785,355	3,658,316	5,668,959
2013	12,703,345	247,393	12,950,738	15,699,513	328,625	100,679	888,518	12,722	716,803	35,689	765,214	17,782,543	30,733,281

Table 8.—Dominant species by weight in the South Peninsula and Chignik Tanner crab districts bottom trawl survey, 2013.

Common name	Species name	% of catch by weight
Flathead sole	<i>Hippoglossoides elassodon</i>	27.8
Walleye pollock	<i>Gadus chalcogrammus</i>	19.5
Arrowtooth flounder	<i>Atheresthes stomias</i>	12.7
Yellowfin sole	<i>Pleuronectes aspera</i>	7.6
Pacific cod	<i>Gadus macrocephalus</i>	6.9
Tanner crab	<i>Chionoecetes bairdi</i>	3.4
Anemone	Order: Actinaria	2.6
Northern rock sole	<i>Lepidopsetta polyxystra</i>	2.0
Pacific halibut	<i>Hippoglossus stenolepis</i>	1.9
Alaska plaice	<i>Pleuronectes quadrituberculatus</i>	1.6
Starry flounder	<i>Platichthys stellatus</i>	1.4
Jellyfish	Class: Schyphozoa	1.4
Hermit crab	Family: Paguridae	0.8
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	0.8
Big skate	<i>Raja binoculata</i>	0.8
Sunflower sea star	<i>Pycnopodia helianthoides</i>	0.7
Aleutian skate	<i>Bathyraja aleutica</i>	0.6
Red king crab	<i>Paralithodes camtschaticus</i>	0.5
Common mud star	<i>Ctenodiscus crispatus</i>	0.5
Mussel	Family: Mytilidae	0.5
All others	(94 species)	6.0
		100.0

Table 9.—Tanner crab abundance estimates from bottom trawl surveys in the Eastern Aleutian District, 1990–2013.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70–91 mm	92–114 mm	>114 mm		<165 mm	≥165 mm			
<b>AKUTAN BAY SECTION</b>													
1990	464,233	779,189	1,243,422	621,580	927,652	454,522	148,140	15,190	0	0	15,190	2,167,084	3,410,504
1991	745,793	580,770	1,326,560	812,713	355,129	533,276	374,345	13,291	13,291	0	26,583	2,102,046	3,428,606
1994	949	2,937	3,887	2,937	7,685	15,638	34,572	2,848	949	0	3,798	64,631	68,518
1995	19,077	5,696	24,774	12,521	8,294	32,137	100,690	949	8,903	0	9,852	163,493	188,267
1999	126,273	698,970	825,243	20,308	148,942	726,903	1,055,747	211,475	4,451	0	215,926	2,167,827	2,993,069
2000	9,124	251,383	260,506	8,077	12,322	168,099	327,390	86,955	17,651	0	104,606	620,494	881,001
2003	57,238	694,037	751,275	38,398	140,011	416,038	123,376	21,145	74,528	4,283	99,956	817,776	1,569,052
2004	132,586	1,022,595	1,155,182	73,127	228,628	293,052	225,319	10,372	24,006	2,078	36,455	856,583	2,011,764
2005	128,780	514,705	643,485	85,513	201,219	191,187	274,967	50,725	9,975	1,187	61,887	814,771	1,458,256
2006	60,461	209,923	270,383	56,504	105,933	262,401	351,972	7,992	93,661	0	101,653	878,462	1,148,847
2007	132,373	364,725	497,097	108,499	217,880	334,162	318,982	9,721	5,195	0	14,916	994,437	1,491,535
2008	13,220	156,340	169,560	5,875	32,584	122,379	223,506	33,743	44,074	0	77,817	462,161	631,721
2009	39,406	954,407	993,812	13,848	33,266	141,310	382,423	63,381	65,382	2,043	130,806	701,655	1,695,467
2010	173,821	237,064	410,886	86,744	80,077	132,415	321,401	30,849	68,018	0	98,867	719,506	1,130,392
2011	19,250	300,674	319,924	20,609	17,051	67,517	196,191	3,798	15,739	0	19,537	320,905	640,829
2012	27,138	392,030	419,167	34,861	37,249	122,481	126,843	14,330	8,312	0	22,642	344,077	763,244
2013	417,843	71,715	489,559	387,636	103,958	129,668	71,279	3,785	13,204	0	16,990	709,530	1,199,090
<b>BEAVER INLET</b>													
1990	943,653	190,344	1,133,995	931,324	229,434	97,915	27,056	3,093	772	0	3,864	1,289,592	2,423,587
1991	468,821	136,295	605,114	446,024	178,136	72,435	21,868	2,123	0	0	2,123	720,587	1,325,702
1994	38,944	51,618	90,563	33,996	6,696	41,034	47,663	17,028	772	0	17,800	147,188	237,751
1995	702,658	28,666	731,324	555,914	15,770	6,531	8,478	3,687	0	0	3,687	590,381	1,321,706
1999	159,654	14,615	174,269	145,897	7,207	5,860	1,543	0	1,543	0	1,543	162,050	336,320
2000	249,908	19,455	269,363	215,534	19,505	11,892	2,577	0	0	0	0	249,505	518,868
2003	70,900	95,139	166,037	135,175	109,282	51,368	5,414	0	0	0	0	301,238	467,277
2006	369,704	62,213	431,916	323,471	19,298	31,705	13,863	829	0	0	829	389,165	821,081
2009	228,492	70,051	298,543	208,012	35,525	87,541	15,011	1,003	0	0	1,003	347,089	645,633
2012	334,022	11,199	345,220	304,364	2,513	6,069	8,582	0	1,161	0	1,161	322,688	667,908
<b>UNALASKA/KALEKTA BAY SECTION</b>													
1990	1,120,173	359,538	1,479,709	664,933	59,141	78,357	42,847	11,544	793	2,002	14,339	859,617	2,339,327
1991	981,240	137,467	1,118,707	920,709	167,932	41,207	25,026	8,906	0	1,001	9,907	1,164,780	2,283,487
1994	17,484	1,465	18,950	17,485	949	0	1,982	949	1,549	0	2,498	22,914	41,867
1995	23,706	7,595	31,300	17,863	3,387	10,847	1,899	1,309	0	0	1,309	35,306	66,607
1999	230,687	194,469	425,157	141,403	95,640	253,997	313,785	123,839	43,171	1,356	168,366	973,189	1,398,346

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Table 9.—Page 2 of 4.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
2000	248,548	952,496	1,201,044	31,132	195,166	243,495	148,668	35,059	12,573	738	48,370	666,834	1,867,878
2003	72,717	7,654	80,371	82,917	6,985	55,771	390,915	99,369	175,774	6,561	281,704	818,293	898,664
2004	347,648	136,331	483,979	338,119	127,521	52,962	26,311	68,737	5,855	8,008	82,600	627,510	1,111,488
2005	854,570	212,211	1,066,782	652,400	241,781	90,170	47,959	20,182	6,616	2,730	29,529	1,061,843	2,128,625
2006	152,412	372,418	524,829	133,520	262,003	138,544	185,052	42,346	460,626	35,311	538,282	1,257,405	1,782,234
2007	436,607	1,997,302	2,433,907	255,144	109,448	308,033	304,795	104,411	211,536	17,922	333,869	1,311,287	3,745,195
2008	324,108	1,990,322	2,314,430	210,497	217,649	246,376	554,496	98,765	64,243	1,254	164,262	1,393,282	3,707,713
2009	176,340	1,306,064	1,482,403	80,051	54,218	122,947	284,196	108,250	105,576	2,988	216,814	758,229	2,240,631
2010	200,948	386,350	587,298	131,427	27,374	30,870	7,382	1,973	1,187	0	3,160	200,215	787,512
2011	25,900	253,899	279,797	29,250	24,995	64,648	40,142	2,167	6,223	1,112	9,502	168,538	448,334
2012	170,447	503,998	674,444	123,914	64,170	169,250	380,612	20,623	215,057	9,546	245,225	983,169	1,657,611
2013	1,295,974	690,495	1,986,467	660,241	225,539	149,244	128,209	6,738	20,450	0	27,188	1,190,420	3,176,888
<b>MAKUSHIN/SKAN BAY SECTION</b>													
1990	440,133	313,413	753,546	368,957	83,150	76,482	125,452	6,927	23,029	0	29,956	683,996	1,437,542
1991	89,388	149,173	238,561	76,314	85,035	51,894	70,212	5,911	29,134	2,576	37,622	321,077	559,638
1994	148,701	159,043	307,743	127,268	19,767	98,635	109,428	36,354	1,662	0	38,016	393,113	700,856
1995	125,736	85,759	211,496	93,308	25,608	38,406	51,872	2,837	8,622	0	11,459	220,653	432,149
1999	539,110	79,122	618,234	487,270	37,716	50,718	41,163	4,800	9,597	0	14,397	631,261	1,249,495
2000	570,431	152,224	722,656	451,979	122,785	42,701	17,963	2,349	0	0	2,349	637,776	1,360,431
2003	66,656	1,156,357	1,223,012	47,889	82,459	278,262	483,759	191,066	74,815	1,159	267,042	1,159,410	2,382,424
2004	119,053	695,345	814,398	124,526	44,029	218,811	371,854	363,797	51,149	7,816	422,760	1,181,979	1,996,378
2005	316,090	229,932	546,021	341,081	23,371	35,372	311,692	165,906	211,288	6,985	384,178	1,095,695	1,641,716
2006	621,330	142,464	763,795	566,017	39,258	35,231	104,047	23,421	118,105	6,863	148,390	892,942	1,656,737
2007	3,454,188	1,068,382	4,522,572	1,702,269	792,080	453,094	145,200	9,987	175,491	1,734	187,213	3,279,857	7,802,429
2008	402,869	1,427,783	1,830,654	286,764	317,850	329,249	172,011	3,381	162,514	4,650	170,544	1,276,421	3,107,074
2009	267,904	1,783,197	2,051,099	217,485	169,488	491,976	210,803	7,792	34,284	0	42,077	1,131,828	3,182,929
2010	159,194	167,098	326,292	114,578	21,375	85,156	215,744	50,636	17,095	0	67,731	504,584	830,875
2011	194,863	254,964	449,828	130,779	29,139	66,221	228,701	26,263	61,034	0	87,296	542,137	991,965
2012	178,868	295,408	474,274	120,983	98,499	58,526	104,356	7,880	20,761	2,316	30,958	413,321	887,594
2013	439,737	784,644	1,224,381	314,619	46,142	130,939	132,057	10,287	37,617	2,925	50,829	674,588	1,898,969
<b>USOF BAY</b>													
1990	103,298	25,189	128,487	103,381	100,686	29,612	2,023	574	0	0	574	236,275	364,763
1991	89,209	70,803	160,012	232,477	259,878	66,540	26,990	4,497	2,625	0	7,122	593,006	753,019
1994	15,861	3,500	19,361	13,783	8,932	6,187	7,638	875	0	0	875	37,413	56,773
1995	33,624	3,343	36,966	42,260	10,195	6,931	4,375	0	2,625	0	2,625	66,386	103,353

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Table 9.—Page 3 of 4.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
1999	79,821	11,426	91,247	70,550	13,340	2,523	0	0	0	0	0	86,412	177,662
2000	52,026	7,968	59,995	48,176	4,710	4,710	0	0	0	0	0	57,596	117,592
2003	30,966	70,430	101,395	34,381	90,009	151,473	30,169	0	899	0	899	306,932	408,328
<b>AKUN BAY</b>													
1990	2,123	1,063	3,187	0	0	0	0	0	0	0	0	0	3,187
1991	0	0	0	1,060	0	0	0	0	0	0	0	1,060	1,060
1994	0	0	0	0	0	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1999	4,253	1,063	5,317	0	4,253	4,253	0	0	0	0	0	8,506	13,823
2000	3,305	5,317	8,621	6,495	3,190	0	0	0	0	0	0	9,684	18,306
2003	0	3,187	3,187	0	1,063	2,127	0	0	0	0	0	3,190	6,377
<b>PUMICESTONE BAY</b>													
1990	48,859	0	48,859	48,607	674	0	0	0	0	0	0	49,281	98,139
1991	24,251	235	24,486	19,207	5,865	1,173	0	0	235	0	235	26,480	50,967
1994	6,510	909	7,419	5,748	5,366	5,220	674	0	0	0	0	17,008	24,428
1995	10,299	3,543	13,841	9,495	3,965	3,754	1,349	0	0	0	0	18,563	32,403
1999	13,078	0	13,078	8,657	1,171	0	1,499	749	749	0	1,499	12,826	25,904
2000	3,304	1,499	4,803	352	749	0	2,997	749	0	0	749	4,848	9,651
2003	231,803	21,096	252,899	284,381	78,593	25,522	2,698	674	0	0	674	391,868	644,768
2004	27,652	674	28,326	17,536	1,348	1,349	337	0	0	0	0	20,570	48,897
2005	46,067	19,559	65,626	42,050	19,559	49,234	7,419	1,349	674	0	2,023	120,285	185,910
2006	36,382	10,683	47,065	52,706	17,526	17,565	6,979	0	469	0	469	95,245	142,310
2007	233,042	2,600	235,642	226,435	30,282	2,600	0	0	0	0	0	259,317	494,959
2008	43,900	4,557	48,456	69,070	130,211	32,586	1,966	0	0	0	0	233,833	282,288
2009	10,439	1,202	11,642	9,326	5,161	9,501	1,466	0	0	0	0	25,453	37,095
2010	18,475	4,751	23,226	21,480	11,290	11,597	5,586	0	0	0	0	49,954	73,180
2011	254,240	528	254,768	233,779	2,639	0	0	1,394	0	0	1,394	237,813	492,581
2012	99,056	10,029	109,085	88,645	13,988	3,167	792	264	0	0	264	106,856	215,941
2013	60,906	15,806	76,712	34,193	14,692	8,944	2,053	1,378	0	0	1,378	61,258	137,971
<b>CAPE IDAK</b>													
1990	3,255	3,662	6,917	0	2,713	0	2,713	0	3,255	0	3,255	8,680	15,597
1991	119,622	2,848	122,470	122,470	3,797	949	1,898	0	0	0	0	129,114	251,585
1994	0	949	949	2,848	5,697	0	0	0	0	0	0	8,545	9,494
1995	0	0	0	0	1,898	0	0	0	0	0	0	1,898	1,898

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Table 9.—Page 4 of 4.

Year	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
	Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
1999	949	2,848	3,798	3,798	3,798	1,898	0	0	0	0	0	9,494	13,292
2000	12,342	5,697	18,039	18,038	19,937	9,493	949	0	0	0	0	48,419	66,456
2003	0	6,646	6,646	1,898	9,493	18,038	0	0	0	0	0	29,431	36,076
<b>INANUDAK BAY</b>													
1990	4,658	0	4,658	0	0	3,110	949	0	0	0	0	4,059	8,717
1994	3,390	0	3,390	1,695	0	0	0	0	0	0	0	1,695	5,086
<b>EASTERN ALEUTIAN DISTRICT TOTALS</b>													
1990	3,130,385	1,672,398	4,802,780	2,738,782	1,403,450	739,998	349,180	37,328	27,849	2,002	67,178	5,298,584	10,101,363
1991	2,518,324	1,077,591	3,595,910	2,630,974	1,055,772	767,474	520,339	34,728	45,285	3,577	83,592	5,058,150	8,654,064
1994	231,839	220,421	452,262	205,760	55,092	166,714	201,957	58,054	4,932	0	62,987	692,507	1,144,773
1995	915,100	134,602	1,049,701	731,361	69,117	98,606	168,663	8,782	20,150	0	28,932	1,096,680	2,146,383
1999	1,153,825	1,002,513	2,156,343	877,883	312,067	1,046,152	1,413,737	340,863	59,511	1,356	401,731	4,051,565	6,207,911
2000	1,148,988	1,396,039	2,545,027	779,783	378,364	480,390	500,544	125,112	30,224	738	156,074	2,295,156	4,840,183
2003	530,280	2,054,546	2,584,822	625,039	517,895	998,599	1,036,331	312,254	326,016	12,003	650,275	3,828,138	6,412,966
2004	626,939	1,854,945	2,481,885	553,308	401,526	566,174	623,821	442,906	81,010	17,902	541,815	2,686,642	5,168,527
2005	1,345,507	976,407	2,321,914	1,121,044	485,930	365,963	642,037	238,162	228,553	10,902	477,617	3,092,594	5,414,507
2006	1,240,289	797,701	2,037,988	1,132,218	444,018	485,446	661,913	74,588	672,861	42,174	789,623	3,513,219	5,551,209
2007	4,256,210	3,433,009	7,689,218	2,292,347	1,149,690	1,097,889	768,977	124,119	392,222	19,656	535,998	5,844,898	13,534,118
2008	784,097	3,579,002	4,363,100	572,206	698,294	730,590	951,979	135,889	270,831	5,904	412,623	3,365,697	7,728,796
2009	722,581	4,114,921	4,837,499	528,722	297,658	853,275	893,899	180,426	205,242	5,031	390,700	2,964,254	7,801,755
2010	552,438	795,263	1,347,702	354,229	140,116	260,038	550,113	83,458	86,300	0	169,758	1,474,259	2,821,959
2011	494,253	810,065	1,304,317	414,417	73,824	198,386	465,034	33,622	82,996	1,112	117,729	1,269,393	2,573,709
2012	809,531	1,212,664	2,022,190	672,767	216,419	359,493	621,185	43,097	245,291	11,862	300,250	2,170,111	4,192,298
2013	2,214,460	1,562,660	3,777,119	1,396,689	390,331	418,795	333,598	22,188	71,271	2,925	96,385	2,635,796	6,412,918

Table 10.—Dominant species by weight in the Eastern Aleutian Tanner crab District bottom trawl survey, 2013.

Common name	Species name	% of catch by weight
Arrowtooth flounder	<i>Atheresthes stomias</i>	27.6
Flathead sole	<i>Hippoglossoides elassodon</i>	19.2
Walleye pollock	<i>Gadus chalcogrammus</i>	17.6
Tanner crab	<i>Chionoecetes bairdi</i>	9.0
Rex sole	<i>Glyptocephalus zachirus</i>	5.3
Pacific cod	<i>Gadus macrocephalus</i>	4.5
Pacific halibut	<i>Hippoglossus stenolepis</i>	2.1
Anemone	Order: Actinaria	1.7
Southern rock sole	<i>Lepidopsetta bilineata</i>	1.6
Hermit crab	Family: Paguridae	1.2
Giant Pacific octopus	<i>Octopus dofleini</i>	1.1
Sunflower sea star	<i>Pycnopodia helianthoides</i>	1.1
Alaska skate	<i>Bathyraja parmifera</i>	0.9
Sea Urchin	<i>Strongylocentrotus</i> spp.	0.9
Bering skate	<i>Bathyraja interrupta</i>	0.7
Basket star	<i>Gorgonocephalus</i> sp.	0.7
Great sculpin	<i>Myoxocephalus polyacanthocephalus</i>	0.5
Oregon triton	<i>Fusitriton oregonensis</i>	0.5
English sole	<i>Parophrys vetulus</i>	0.4
Jellyfish	Class: Schyphozoa	0.2
All others	(78 species)	3.2
		100.0

Table 11.—Bitter crab disease (BCD) percent prevalence in Tanner crab by station and year from Alitak Bay, Kodiak District, hemolymph samples, 2002–2011.

Station	BITTER CRAB SAMPLING YEAR									
	2002	2003 <sup>a</sup>	2004	2005	2006 <sup>b</sup>	2007	2008	2009	2010	2011
ALA	6.7		3.3	0.0		3.3	3.3	0.0	0.0	3.3
ALB	3.3		0.0	0.0		3.6	6.7	6.7	0.0	0.0
ALC	0.0		0.0	6.7		0.0	3.4	0.0	0.0	0.0
ALD	0.0		3.3	3.4		0.0	10.0	0.0	0.0	0.0
ALF	3.3		0.0	0.0		3.3	3.3	0.0	0.0	0.0
ALG	3.3		3.3	3.3		1.7	6.7	6.7	0.0	0.0
ALH	3.3		3.3	0.0	9.1	3.3	0.0	0.0	0.0	3.3
ALI	0.0		0.0	0.0		10.0	0.0	3.3	0.0	0.0
ALJ	0.0		3.3	3.3	14.3	13.8	10.0	0.0	0.0	0.0
ALK	63.3		0.0	16.7	15.0	10.3	0.0	16.7	0.0	7.1
ALL	0.0		6.7	3.3	0.0	0.0	3.3	6.7	0.0	0.0
ALM	13.3		13.3	3.3	0.0	6.9	6.7	0.0	0.0	0.0
ALO <sup>c</sup>	6.7		6.7	0.0	25.0	4.7	6.9	13.3		0.0
ALP	26.7		3.3	10.3	40.0	32.1	25.8	6.9	1.7	0.0
ALQ	30.0		3.4	0.0		27.6	34.5	6.9	3.6	3.4
ALR	10.0		0.0	3.3	28.0	40.0	20.0	0.0	0.0	0.0
Total <sup>d</sup>	4.3		2.5	3.2	8.6	7.2	6.4	3.8	0.3	1.1

<sup>a</sup> No samples in 2003.

<sup>b</sup> Some stations were not sampled in 2006.

<sup>c</sup> Was not towed in 2010.

<sup>d</sup> Percent prevalence of BCD in the entire sampled Alitak Bay Tanner crab population.

Table 12.—Tanner crab per station estimated to have bitter crab disease (BCD) and abundance estimates from stations sampled for bitter crab in Alitak Bay, Kodiak District, 2002–2011.

Station	BITTER CRAB SAMPLING YEAR									
	2002	2003 <sup>a</sup>	2004	2005	2006 <sup>b</sup>	2007	2008	2009	2010	2011
ALA	8,593		865	0		4,967	5,678	0	0	428
ALB	4,721		0	0		1,546	29,376	26,071	0	0
ALC	0		0	9,840		0	16,560	0	0	0
ALD	0		3,646	1,154		0	58,992	0	0	0
ALF	38,829		0	0		175,476	33,165	0	0	0
ALG	17,584		5,374	3,465		277,673	37,062	11,982	0	0
ALH	25,345		284	0	22,586	75,772	0	0	0	3,141
ALI	0		0	0		26,080	0	6,582	0	0
ALJ	0		2,696	4,478	60,823	192,764	45,849	0	0	0
ALK	38,660		0	17,865	23,788	278,035	0	11,339	0	6,175
ALL	0		5,201	2,613	0	0	8,275	5,396	0	0
ALM	38,314		17,668	2,142	0	159,625	25,178	0	0	0
ALO <sup>c</sup>	12,830		10,867	0	29,028	59,396	8,572	17,566		0
ALP	44,107		4,585	7,920	3,402	122,216	99,663	14,080	1,629	0
ALQ	22,393		9,393	0		76,910	70,617	21,999	5,696	4,400
ALR	11,493		0	5,095	47,772	63,980	35,018	0	0	0
Total infected	262,870		60,579	54,572	187,399	1,514,439	474,006	115,014	7,325	14,145
Abundance Estimate <sup>d</sup>	6,121,887	2,114,926	2,388,637	1,681,763	2,188,128	20,957,848	7,439,279	3,012,570	2,898,814	1,314,078

<sup>a</sup> No samples in 2003.

<sup>b</sup> Some stations were not sampled in 2006.

<sup>c</sup> Not towed in 2010.

<sup>d</sup> Includes only estimated abundance from Alitak Bay stations sampled for bitter crab disease.

Table 13.—Near-bottom water temperature (°C) for warmest and coldest bays during the 2013 bottom trawl survey and the average water temperature in those bays from 2004-2012 surveys.

District	Location <sup>a</sup>	Year									
		2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<b>KODIAK</b>											
	Kukak Bay	<b>8.08</b>	<b>7.65</b>	<b>8.19</b>	<b>8.28</b>	9.95	9.61	<b>9.02</b>	<b>9.03</b>	<b>9.23</b>	<b>8.00</b>
	Deadman Bay	2.62	0.43	2.71	2.49	6.18	4.67	2.83	1.93	3.45	3.09
District Average		5.49	5.30	5.81	6.17	7.64	7.23	6.07	6.02	6.49	6.01
<b>CHIGNIK</b>											
	Kujulik Bay	<b>6.13</b>	6.92	<b>5.90</b>	7.26	9.30	5.63	6.93	7.95	8.45	<b>7.46</b>
	Chignik Bay	4.73	5.58	4.95	5.81	8.92	9.38	8.24	6.24	6.15	5.72
District Average		5.18	6.11	5.26	6.58	9.96	9.01	8.86	6.95	7.04	6.41
<b>SOUTH PENINSULA</b>											
	Cold Bay	<b>9.35</b>	<b>8.12</b>	<b>7.99</b>	<b>8.45</b>	9.47	<b>8.77</b>	<b>9.62</b>	<b>9.44</b>	<b>9.27</b>	<b>9.78</b>
	Stepovak Bay	4.30	5.11	4.55	5.62	9.15	4.25	5.87	5.79	5.50	6.15
District Average		5.82	5.38	5.42	6.12	10.14	7.25	8.11	6.57	6.58	6.38
<b>EASTERN ALEUTIAN</b>											
	Kalekta Bay	<b>8.35</b>	<b>5.90</b>	<b>6.42</b>	<b>6.42</b>	8.30	6.19	<b>7.93</b>	<b>7.20</b>	6.30	<b>6.69</b>
	Makushin Bay	4.72	4.13	4.71	4.57	8.12	4.82	5.33	4.92	5.25	5.06
District Average		5.83	5.06	5.17	5.34	8.21	5.46	5.96	5.84	5.83	5.70
Survey Average		5.56	5.40	5.61	6.16	8.57	7.33	6.91	6.25	6.54	6.13

Note: Temperatures presented are the average temperature of all hauls within the area of interest (bay, district, or entire survey).

<sup>a</sup> Locations listed are the warmest (**bold**) and coldest (*grey italics*) areas in each district during the 2013 trawl survey. Previous years' temperatures are from those areas but may not have been the warmest or coldest locations during that respective year.

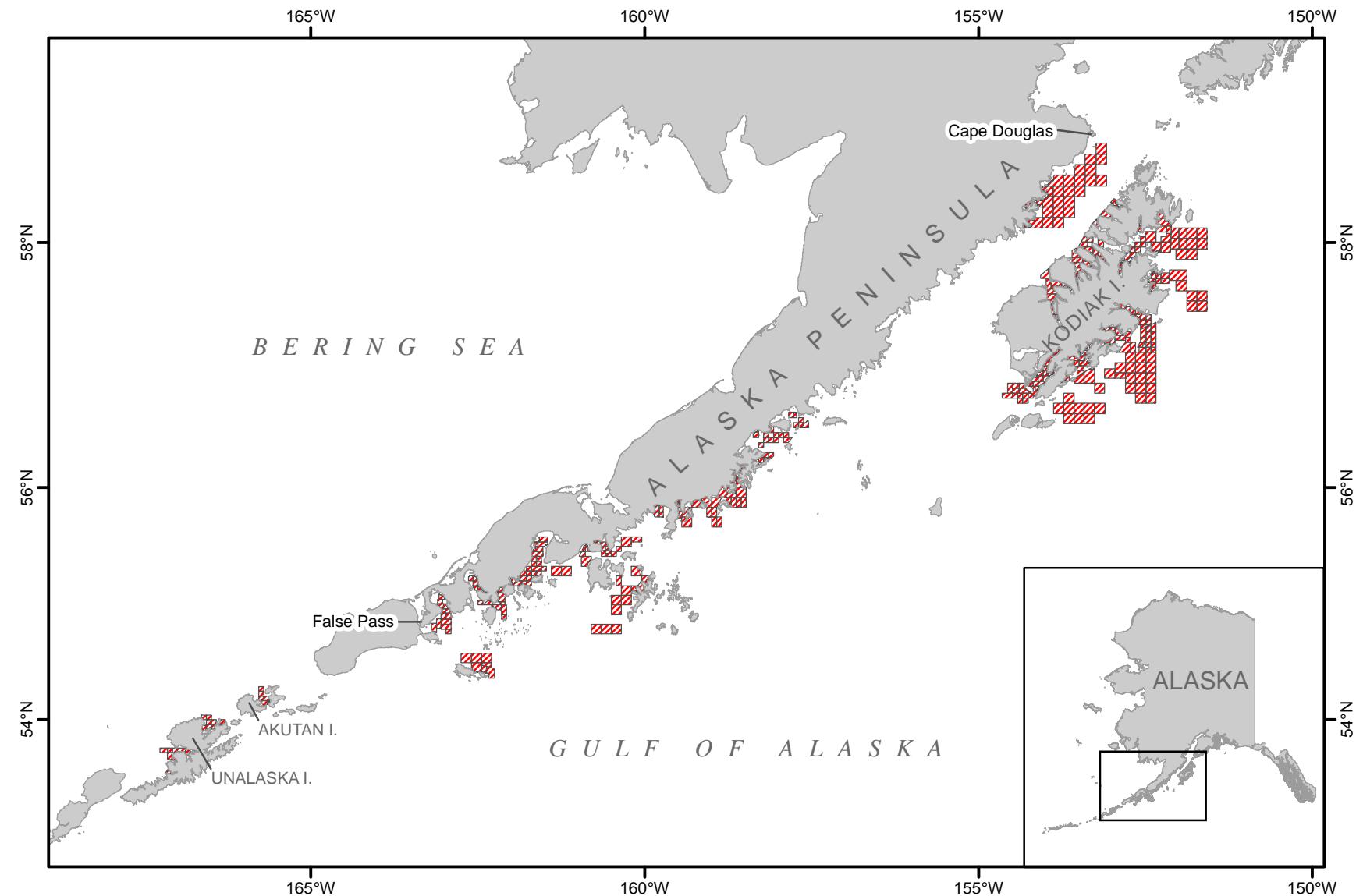


Figure 1.—Bottom trawl survey stations, 2013.

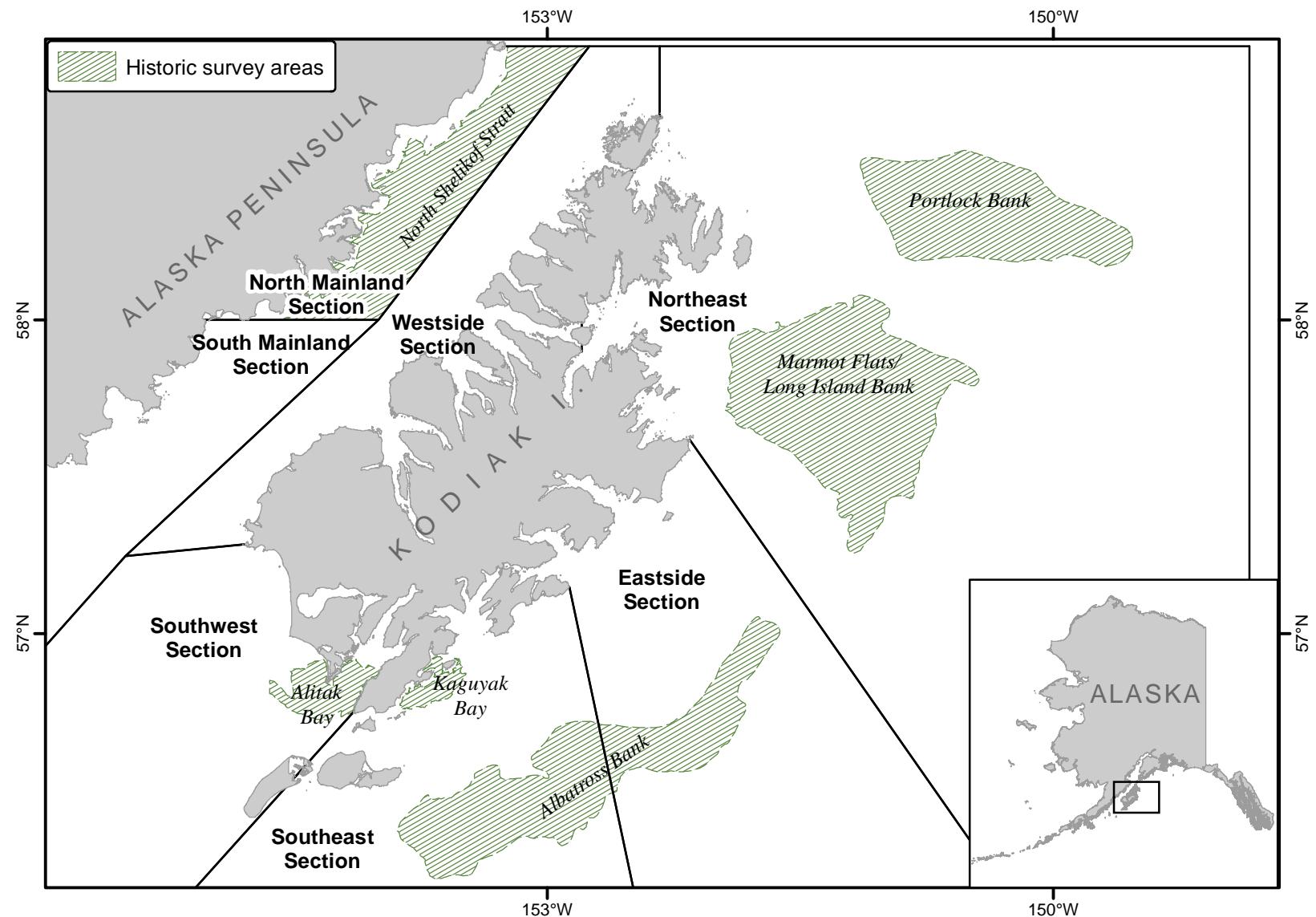


Figure 2.—Historic trawl survey areas and current Tanner crab management sections in the Kodiak District.

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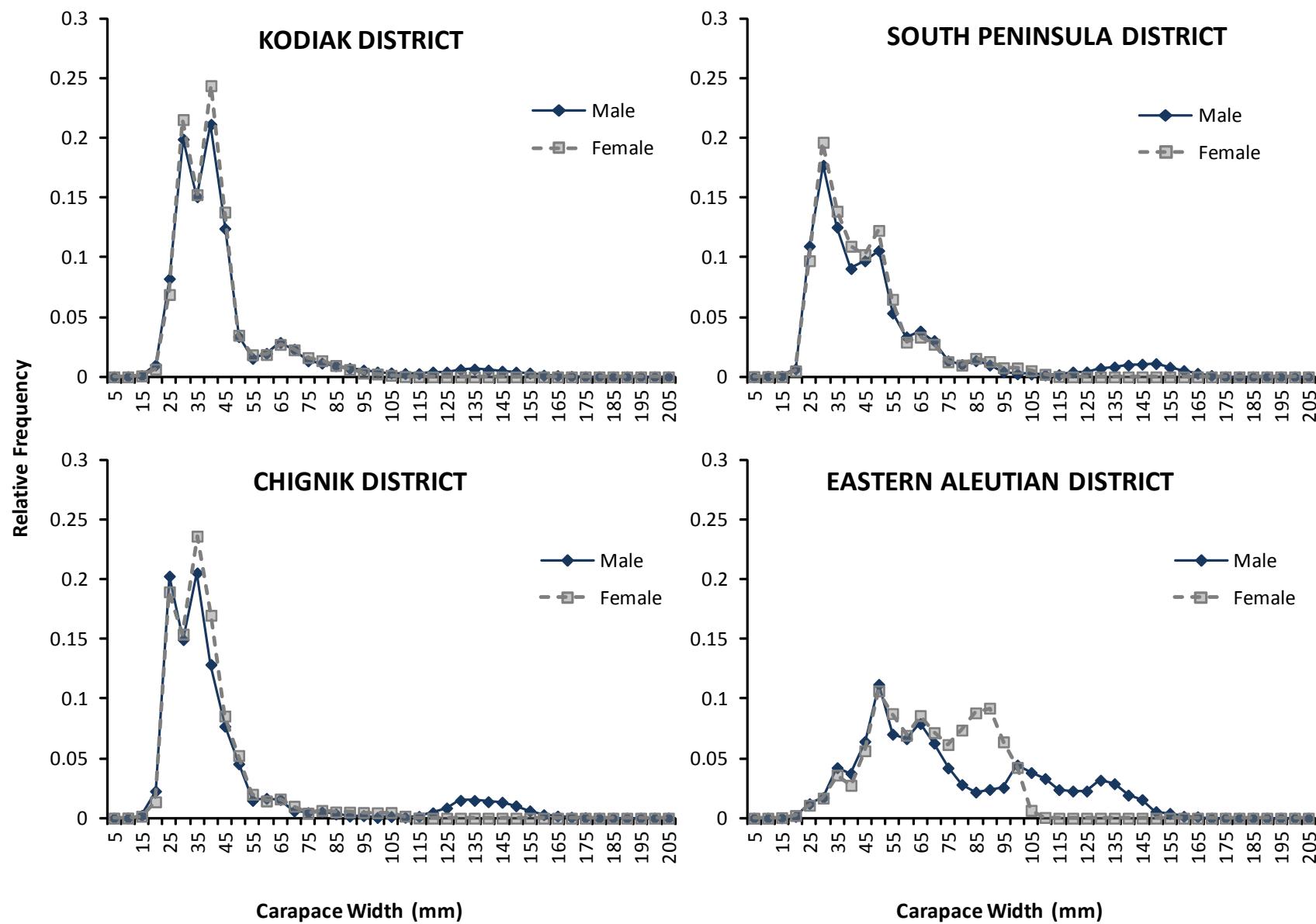


Figure 3.—Tanner crab relative size frequency by sex and district from the 2013 bottom trawl survey.

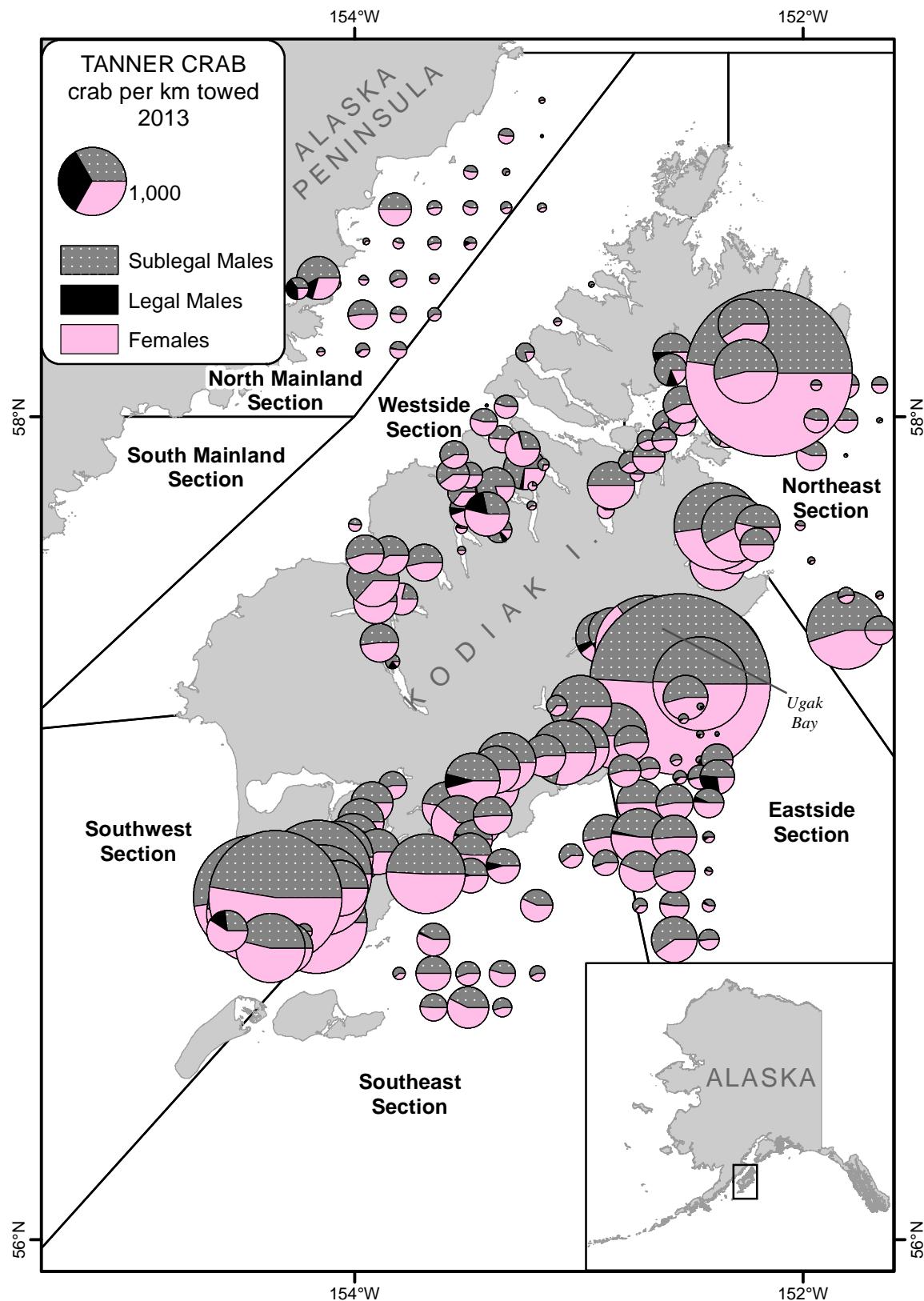


Figure 4.—Tanner crab per kilometer towed in the 2013 Kodiak District bottom trawl survey.

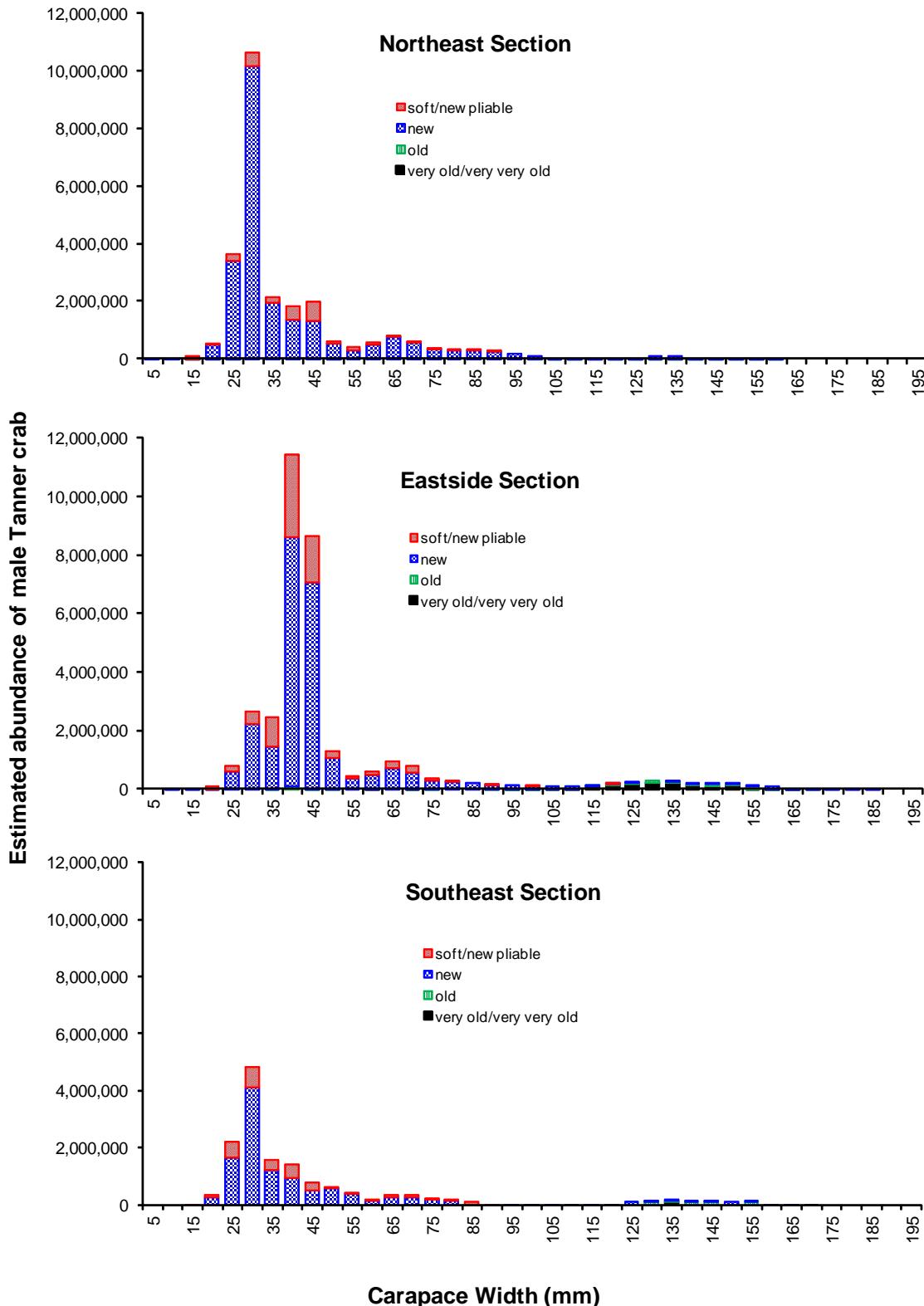


Figure 5.—Tanner crab male abundance estimate by carapace width (mm) and shell condition from the Northeast, Eastside, and Southeast sections of the 2013 Kodiak District bottom trawl survey.

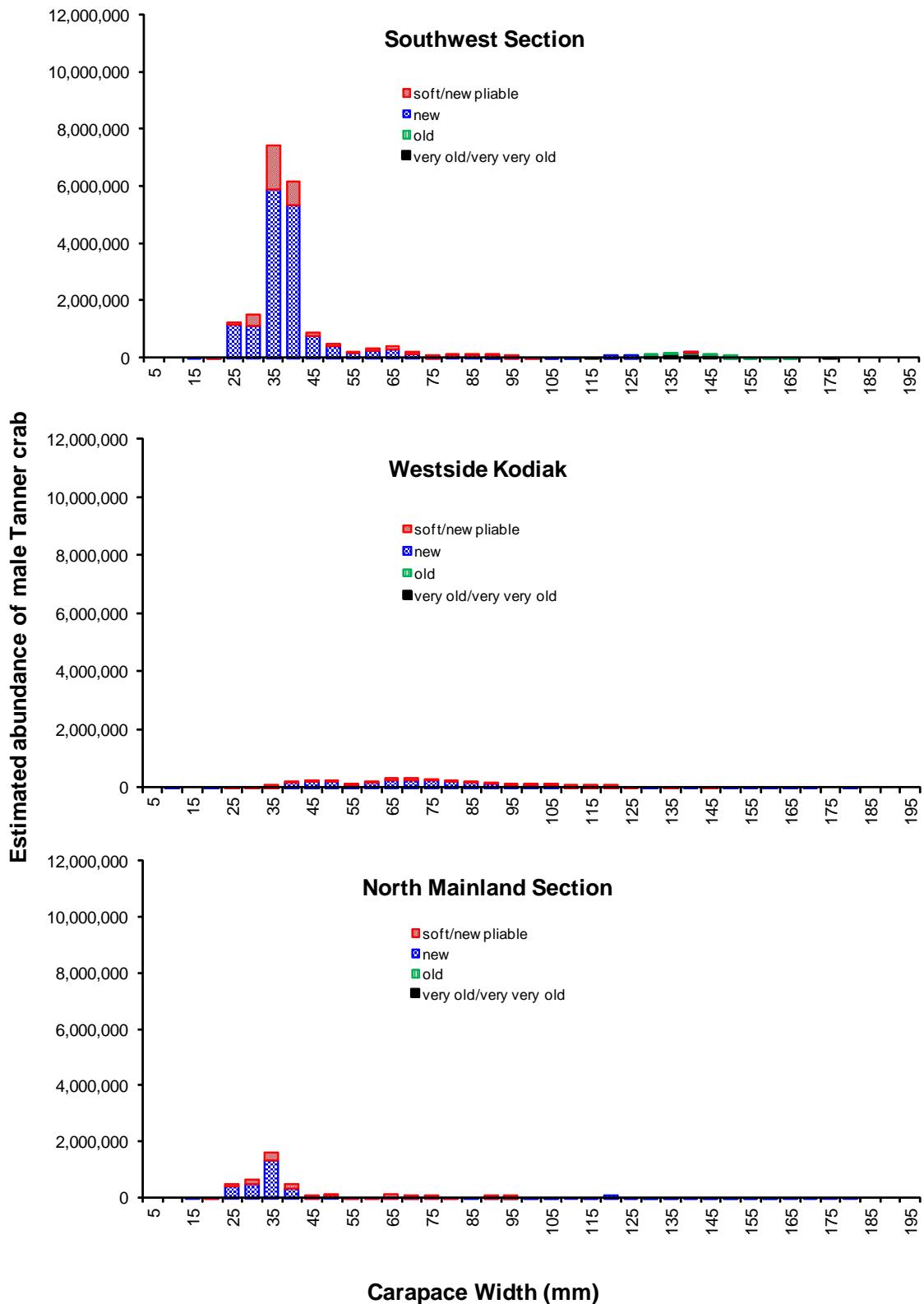


Figure 6.—Tanner crab male abundance estimate by carapace width (mm) and shell condition from the Southwest, Westside, and North Mainland sections of the 2013 Kodiak District bottom trawl survey.

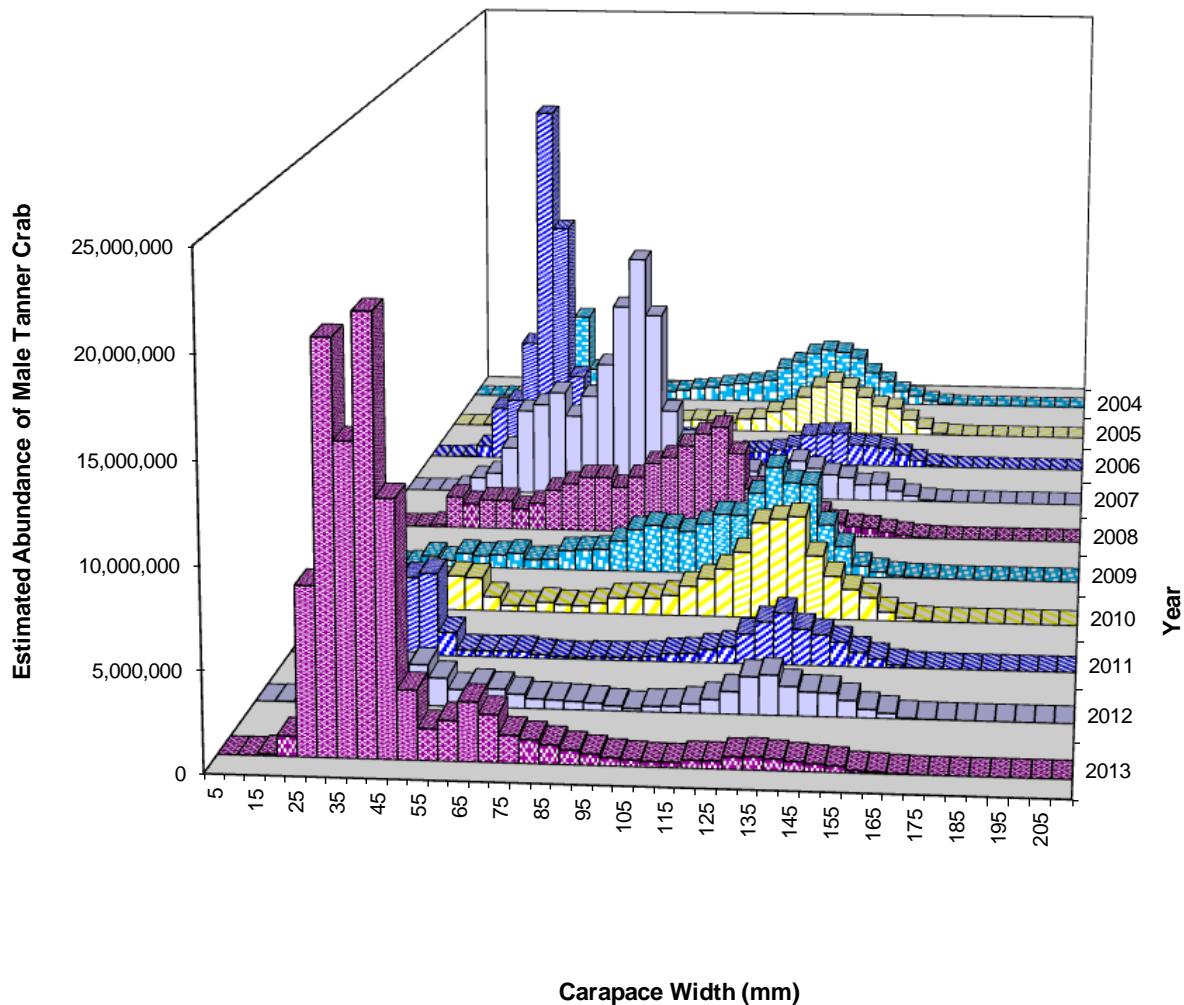


Figure 7.—Tanner crab male abundance estimate by carapace width in the Kodiak District bottom trawl surveys, 2004–2013.

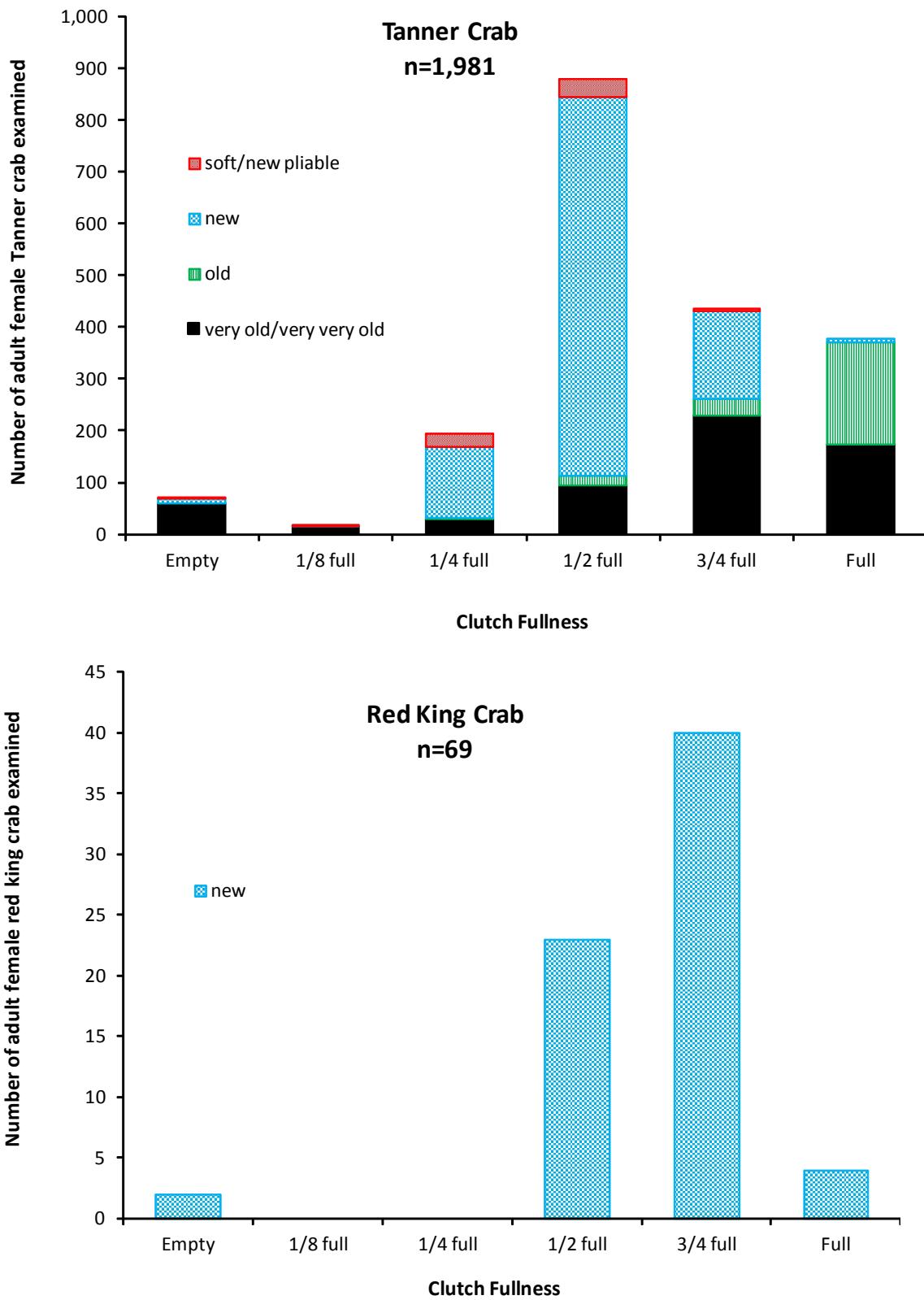


Figure 8.—Tanner crab and red king crab adult female egg clutch fullness by shell condition in the Kodiak District bottom trawl survey, 2013.

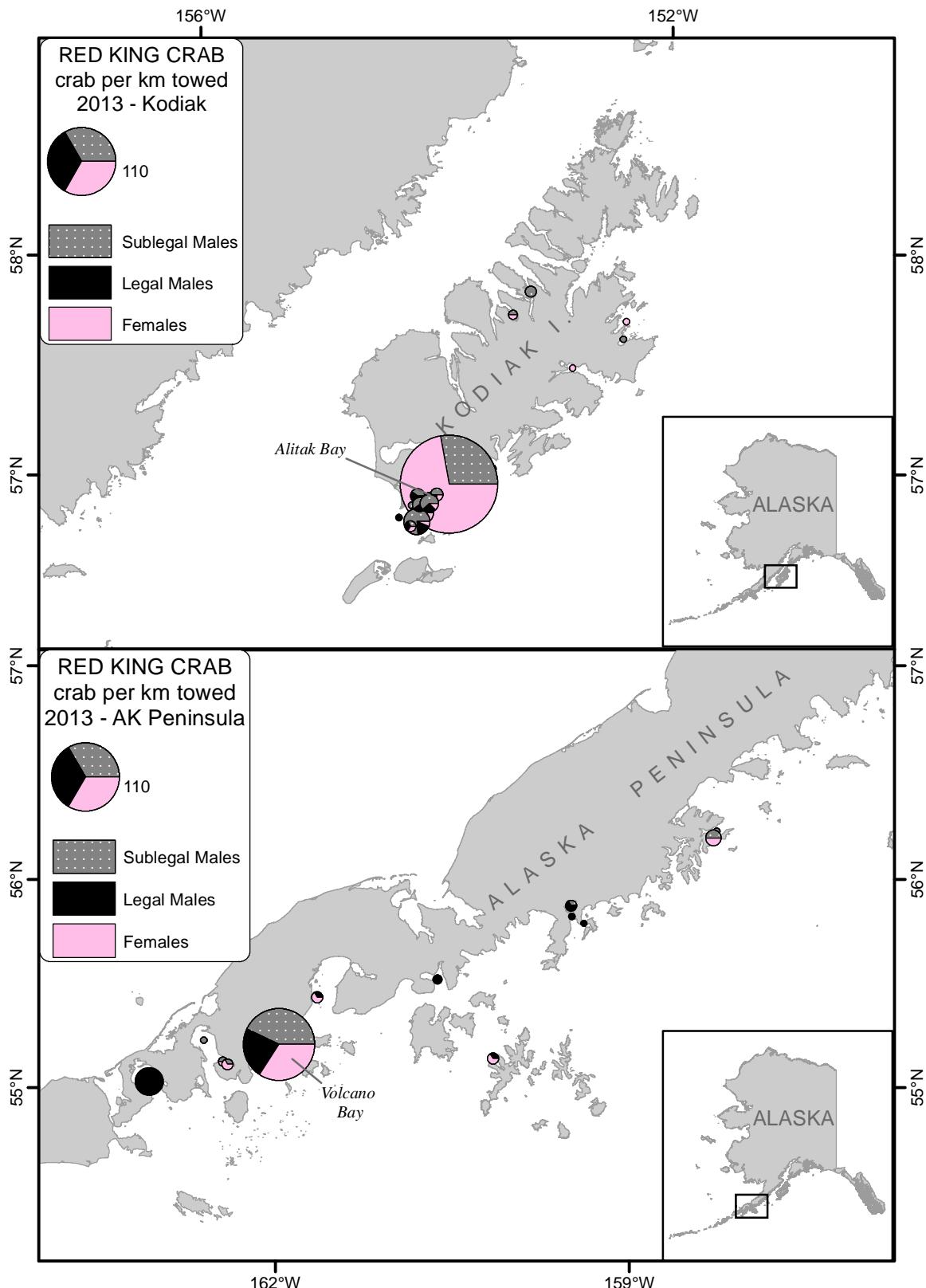


Figure 9.—Red king crab per kilometer towed in the 2013 Kodiak (upper) and Alaska Peninsula areas (lower) bottom trawl survey.

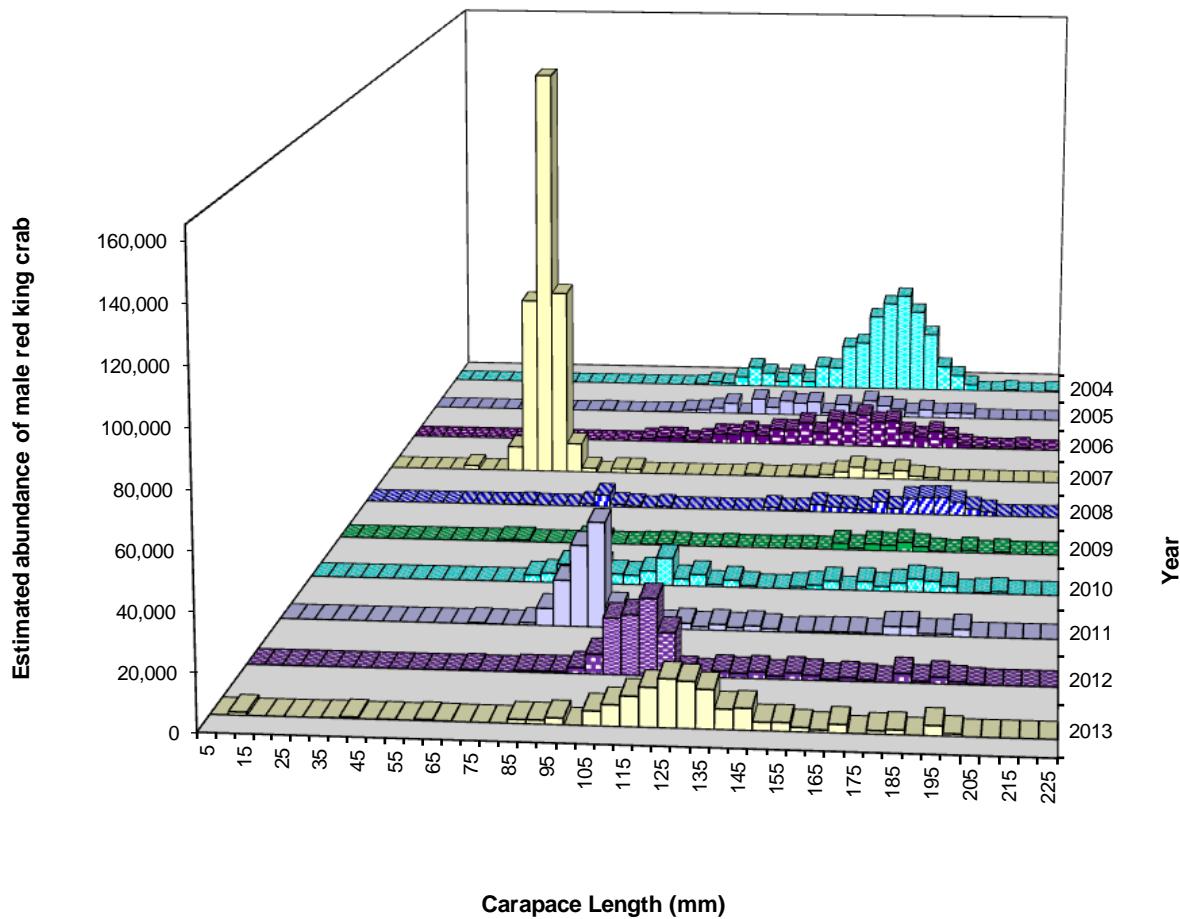


Figure 10.—Red king crab male abundance estimate by carapace length in the Kodiak Area bottom trawl surveys, 2004–2013.

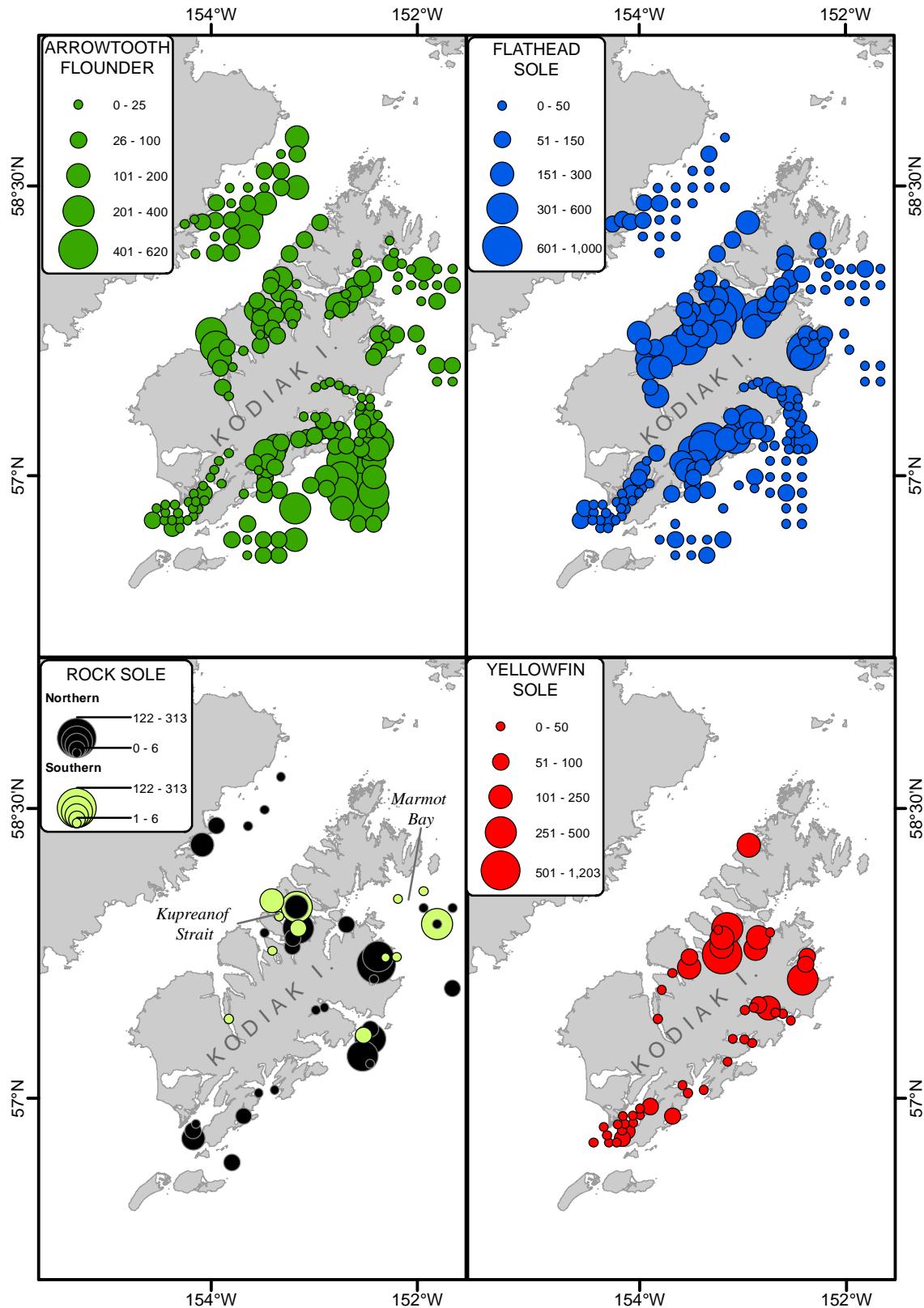


Figure 11.—Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2013 Kodiak Area bottom trawl survey.

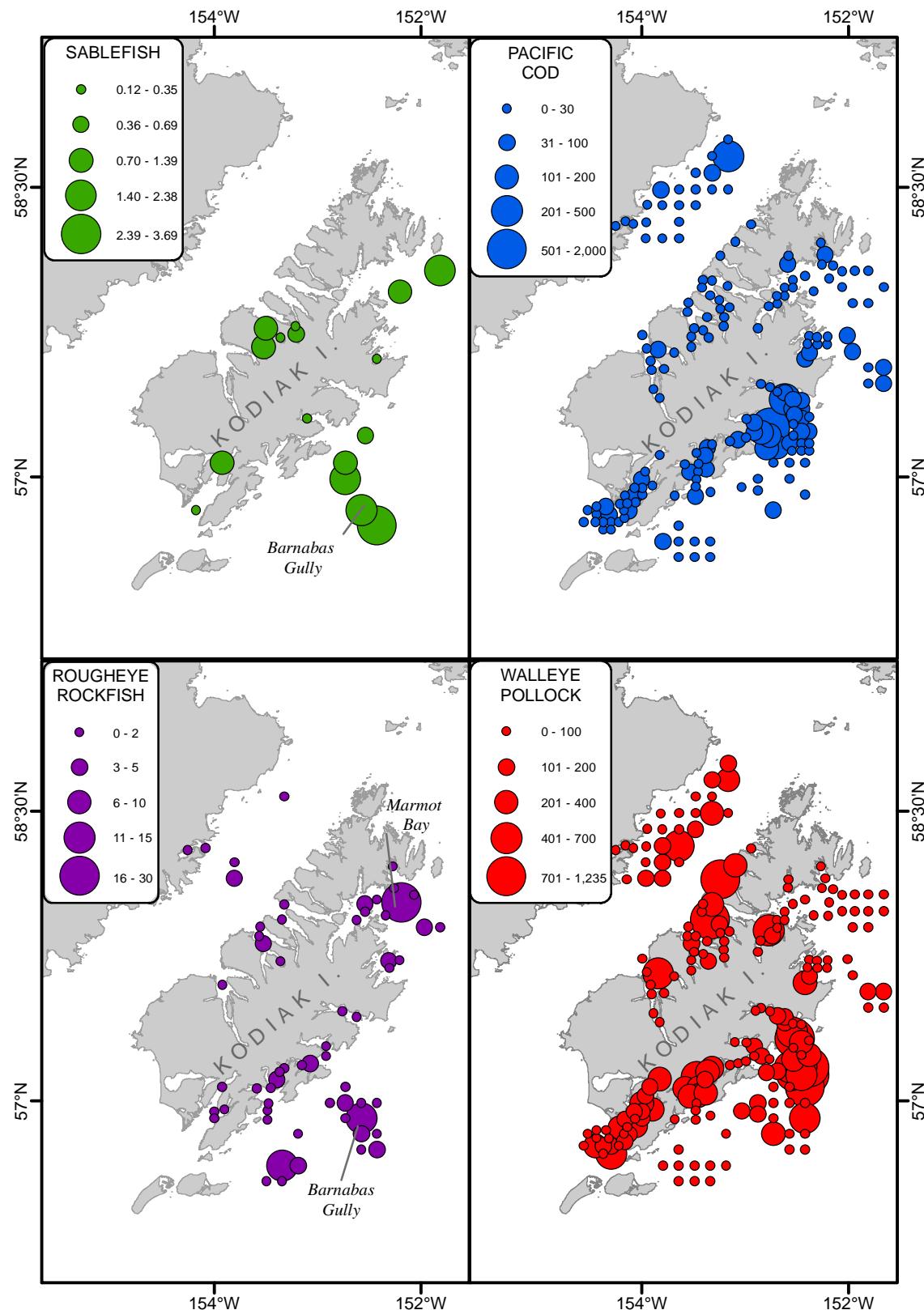


Figure 12.—Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2013 Kodiak Area bottom trawl survey.

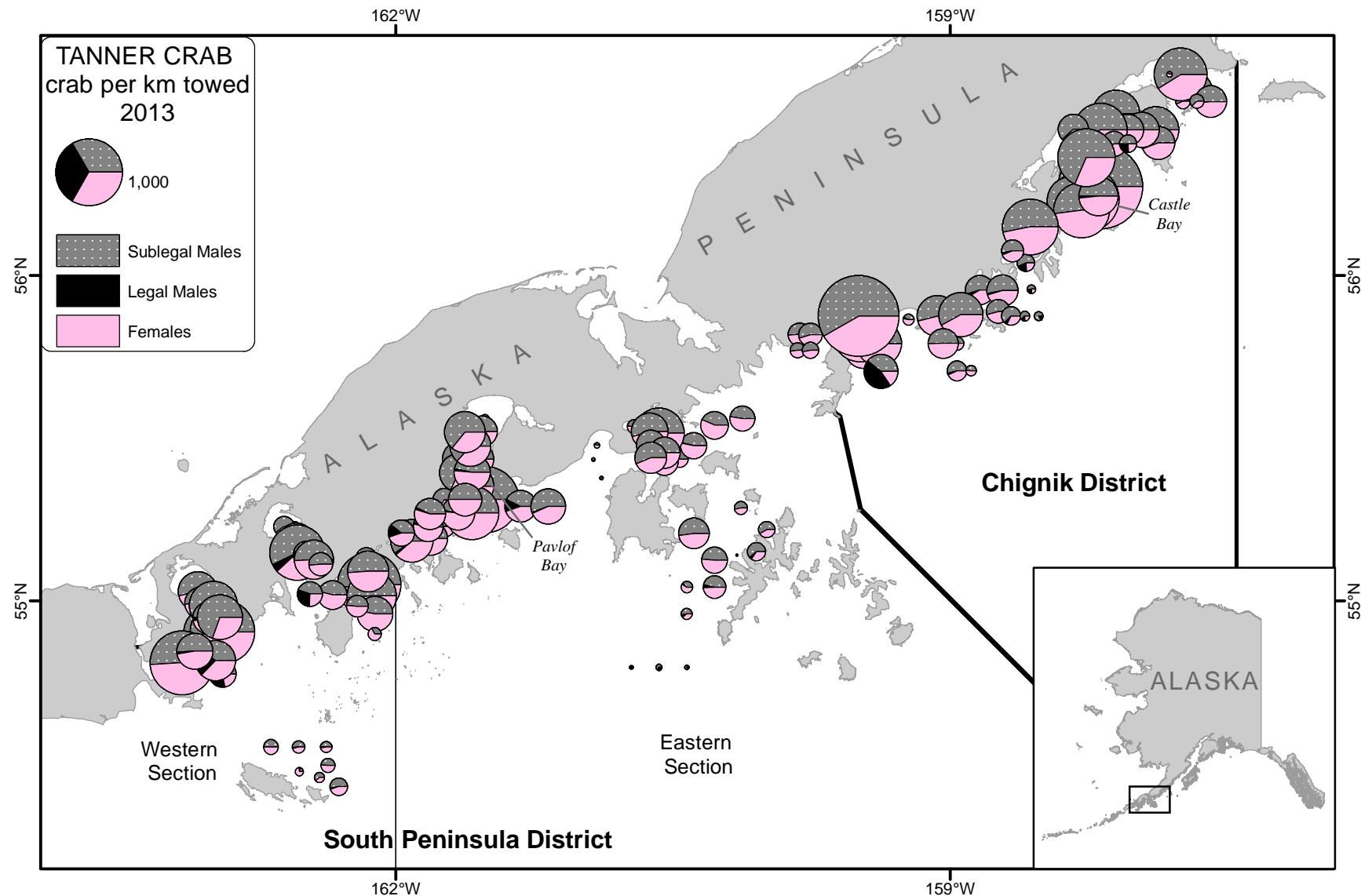


Figure 13.—Tanner crab per kilometer towed in the 2013 South Peninsula and Chignik districts bottom trawl survey.

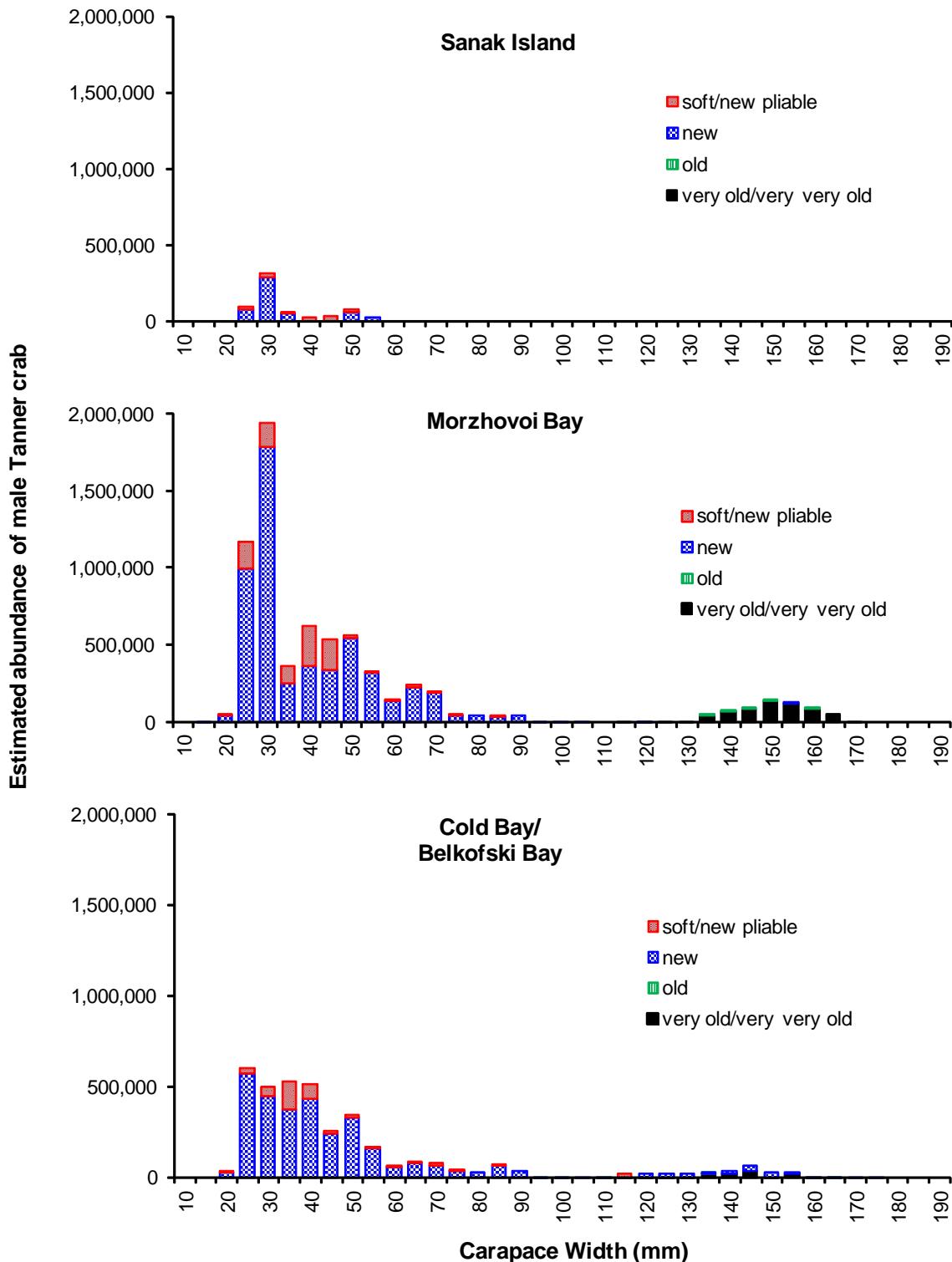


Figure 14.—Tanner crab male abundance estimate by carapace width and shell condition from Sanak Island, Morzhovoi Bay, and Cold Bay/Belkofski Bay in the Western Section of the 2013 South Peninsula District bottom trawl survey.

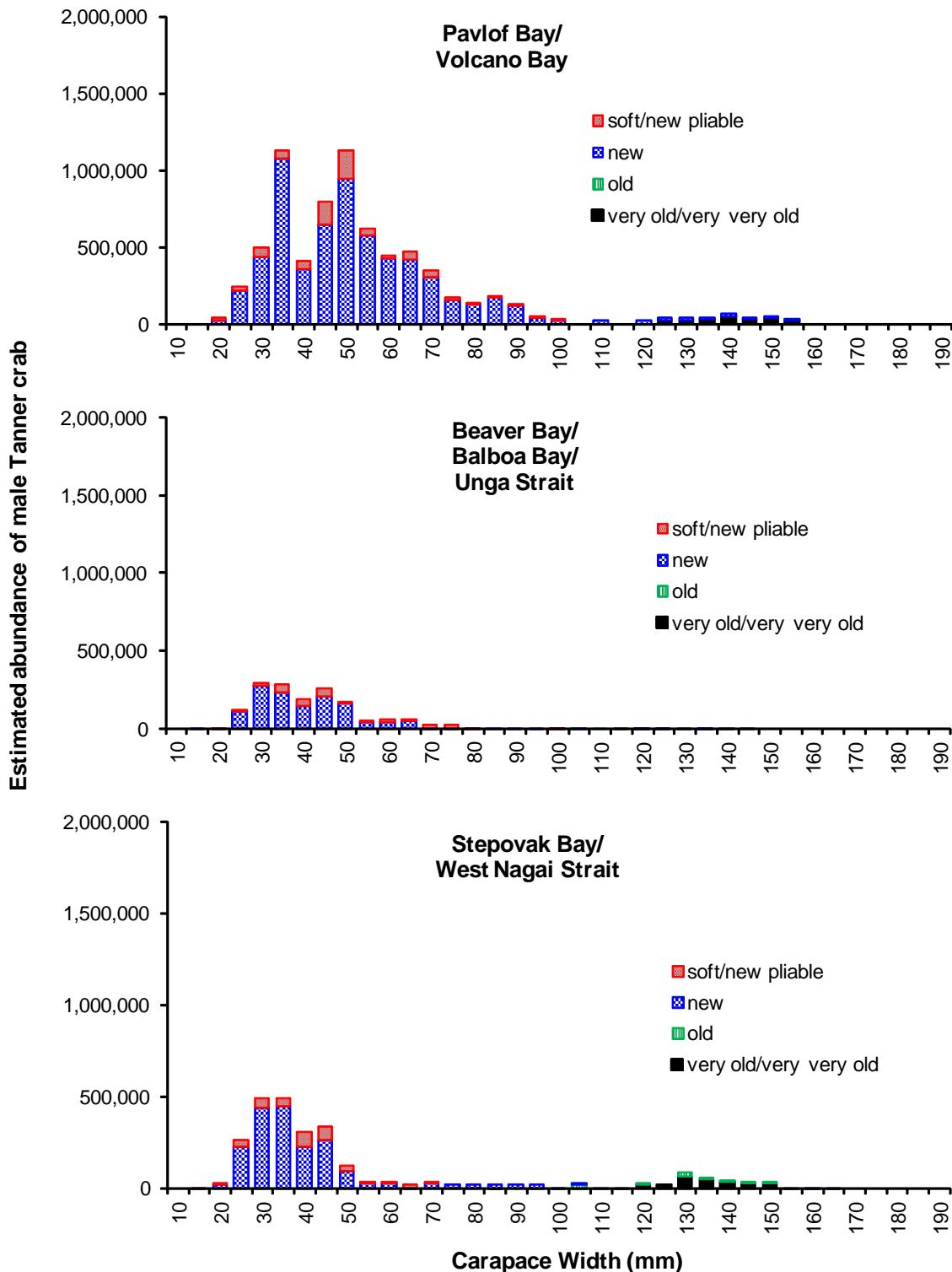


Figure 15.—Tanner crab male abundance estimate by carapace width and shell condition from Pavlof Bay/Volcano Bay, Beaver Bay/Balboa Bay/Unga Strait, and Stepovak Bay/West Nagai Strait in the Eastern Section of the 2013 South Peninsula District trawl survey.

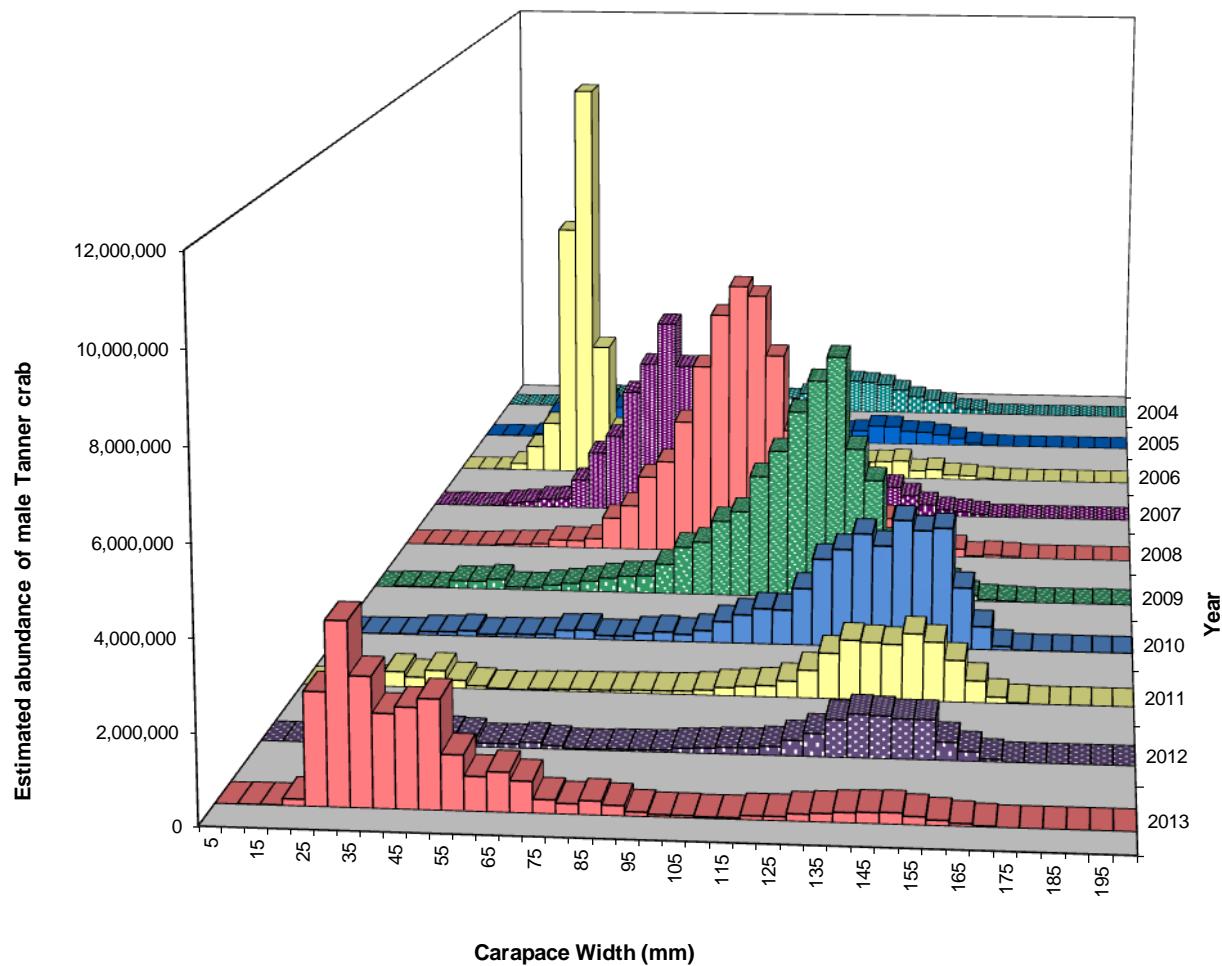


Figure 16.—Tanner crab male abundance estimate by carapace width in the South Peninsula District bottom trawl surveys, 2004–2013.

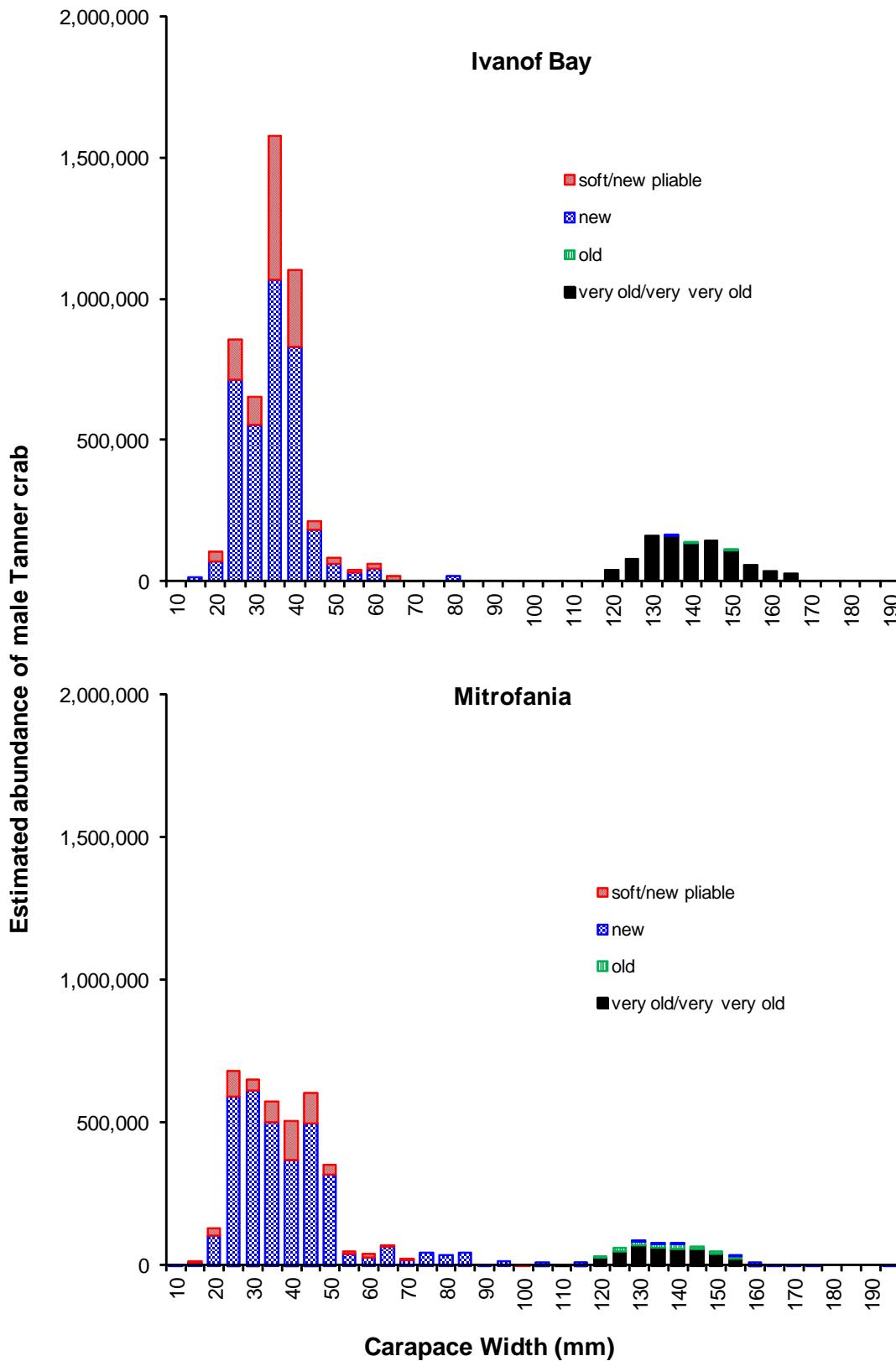


Figure 17.—Tanner crab male abundance estimate by carapace width and shell condition from Ivanof Bay and Mitrofania in the 2013 Chignik District bottom trawl survey.

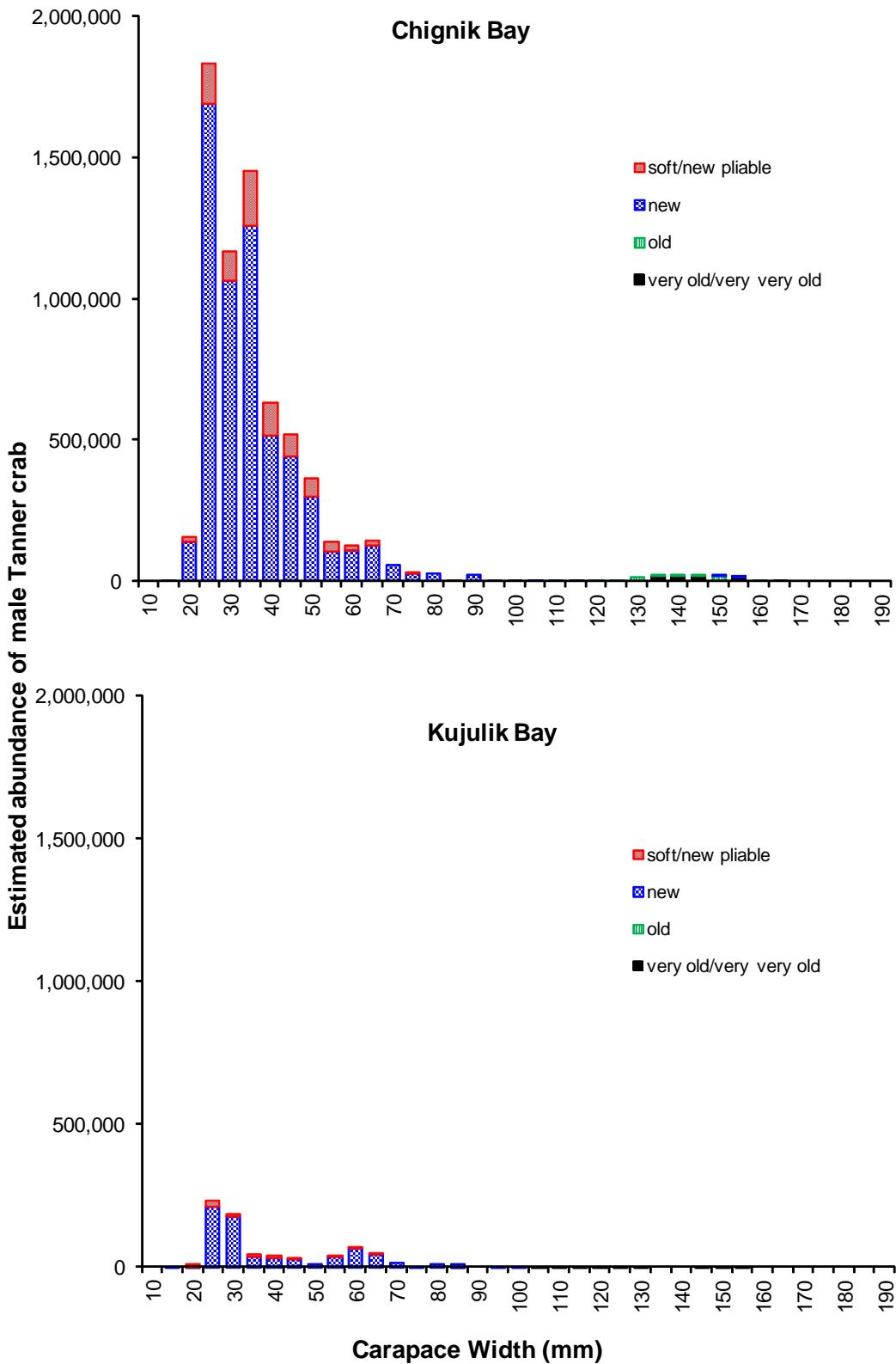


Figure 18.—Tanner crab male abundance estimate by carapace width and shell condition from Chignik Bay and Kujulik Bay in the 2013 Chignik District bottom trawl survey.

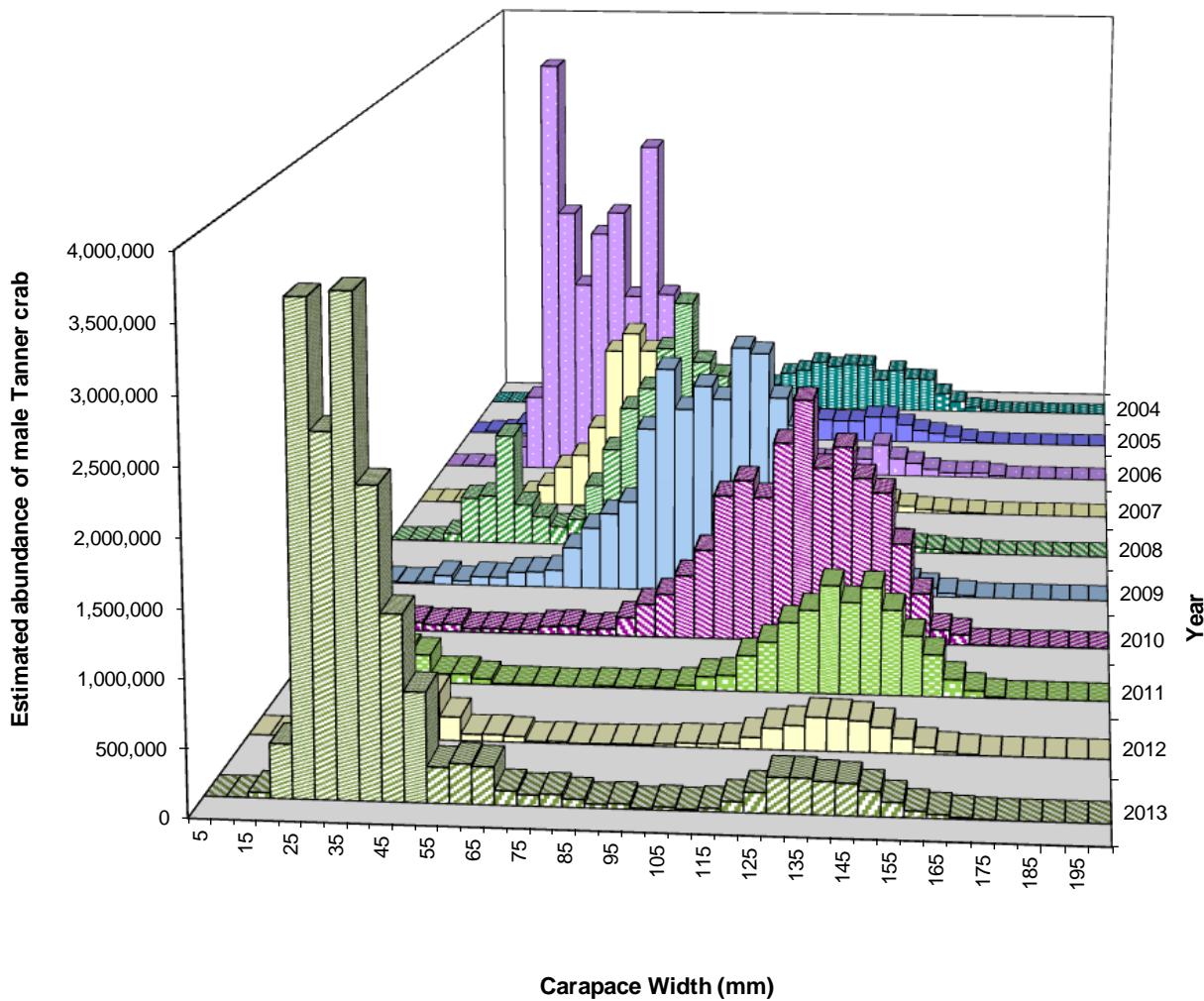


Figure 19.—Tanner crab male abundance estimate by carapace width in the Chignik District bottom trawl surveys, 2004–2013.

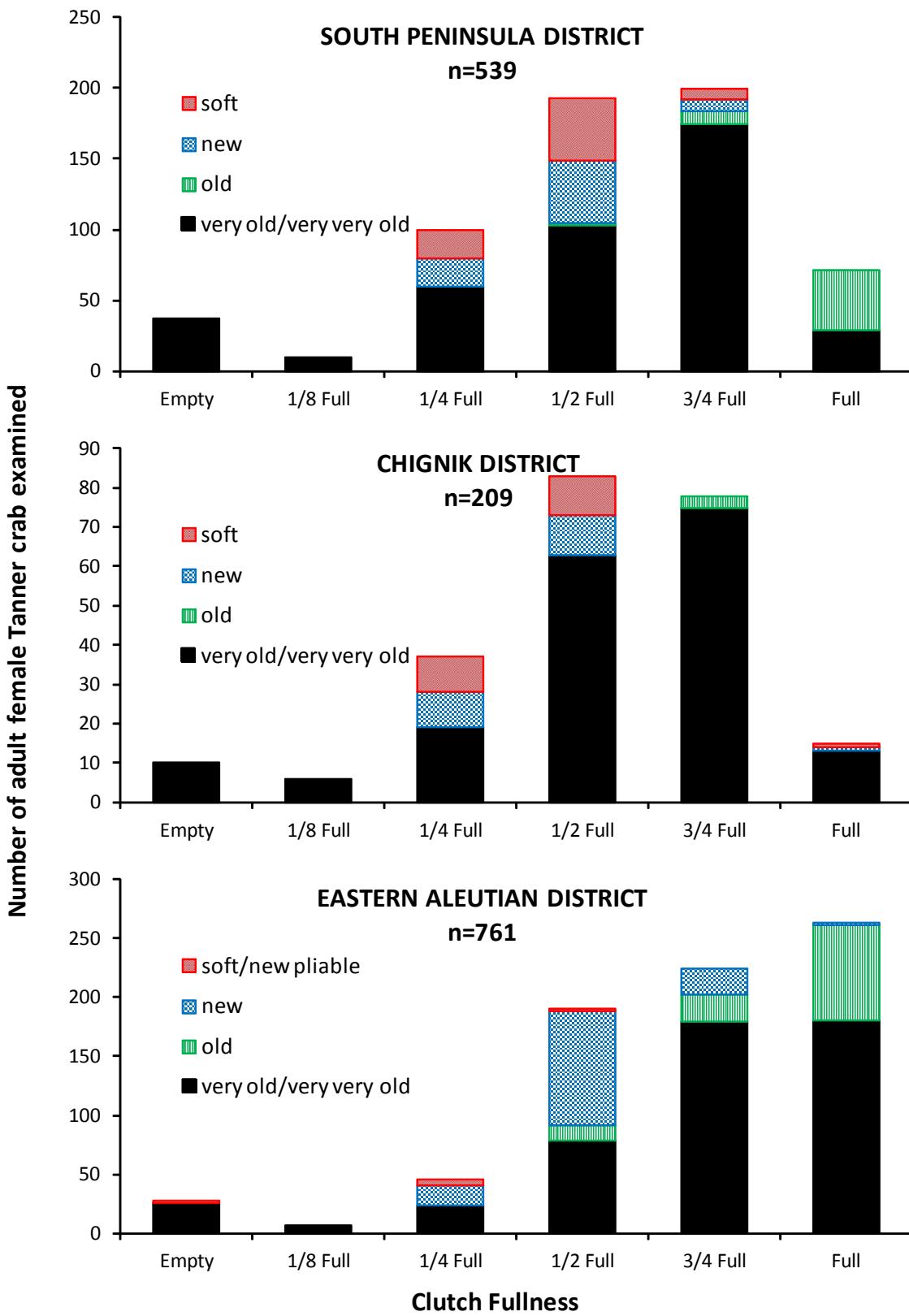


Figure 20.—Tanner crab adult female egg clutch fullness by shell condition in the South Peninsula, Chignik, and Eastern Aleutian districts bottom trawl survey, 2013.

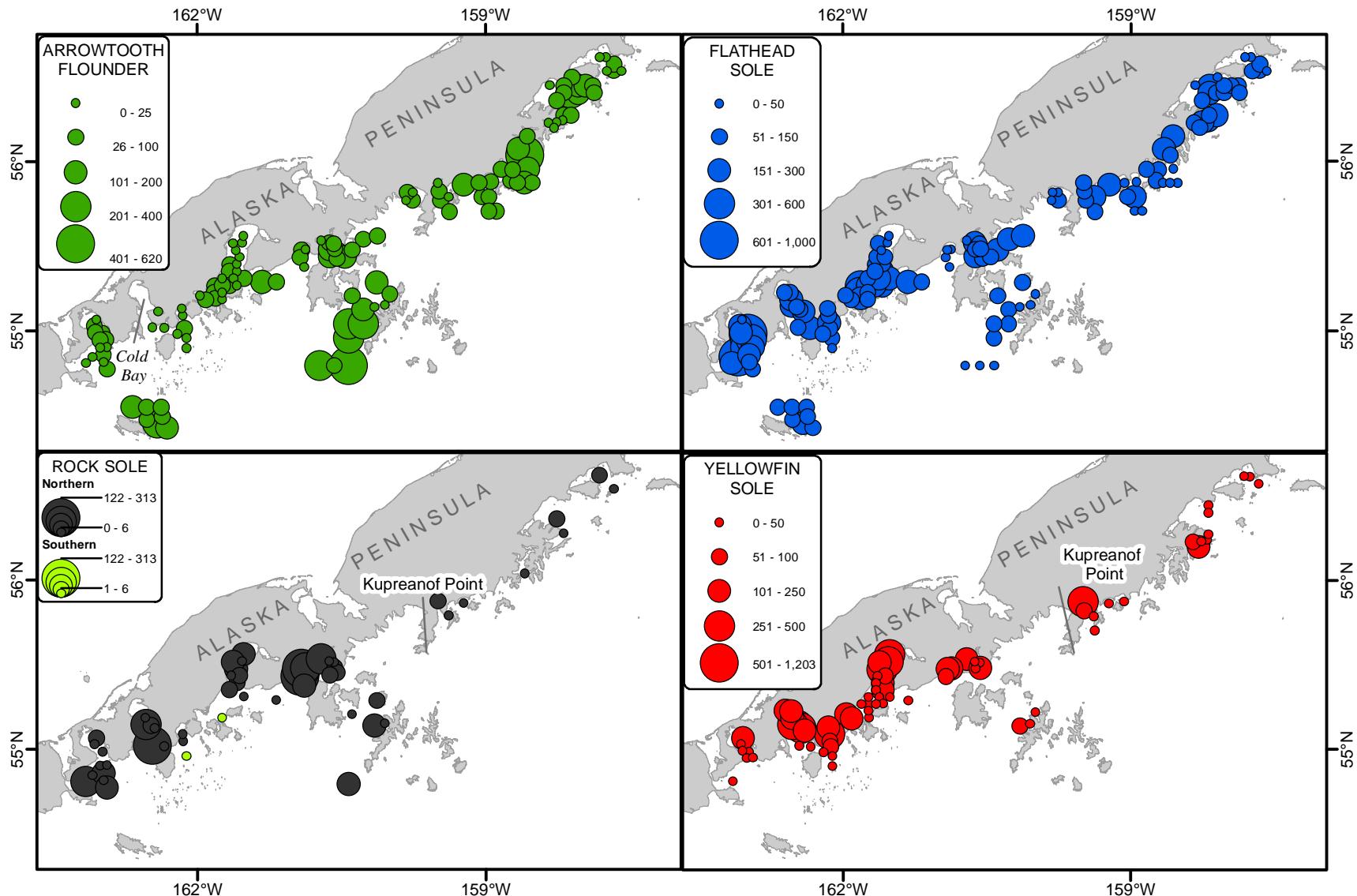


Figure 21.—Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2013 Chignik and South Alaska Peninsula areas bottom trawl survey.

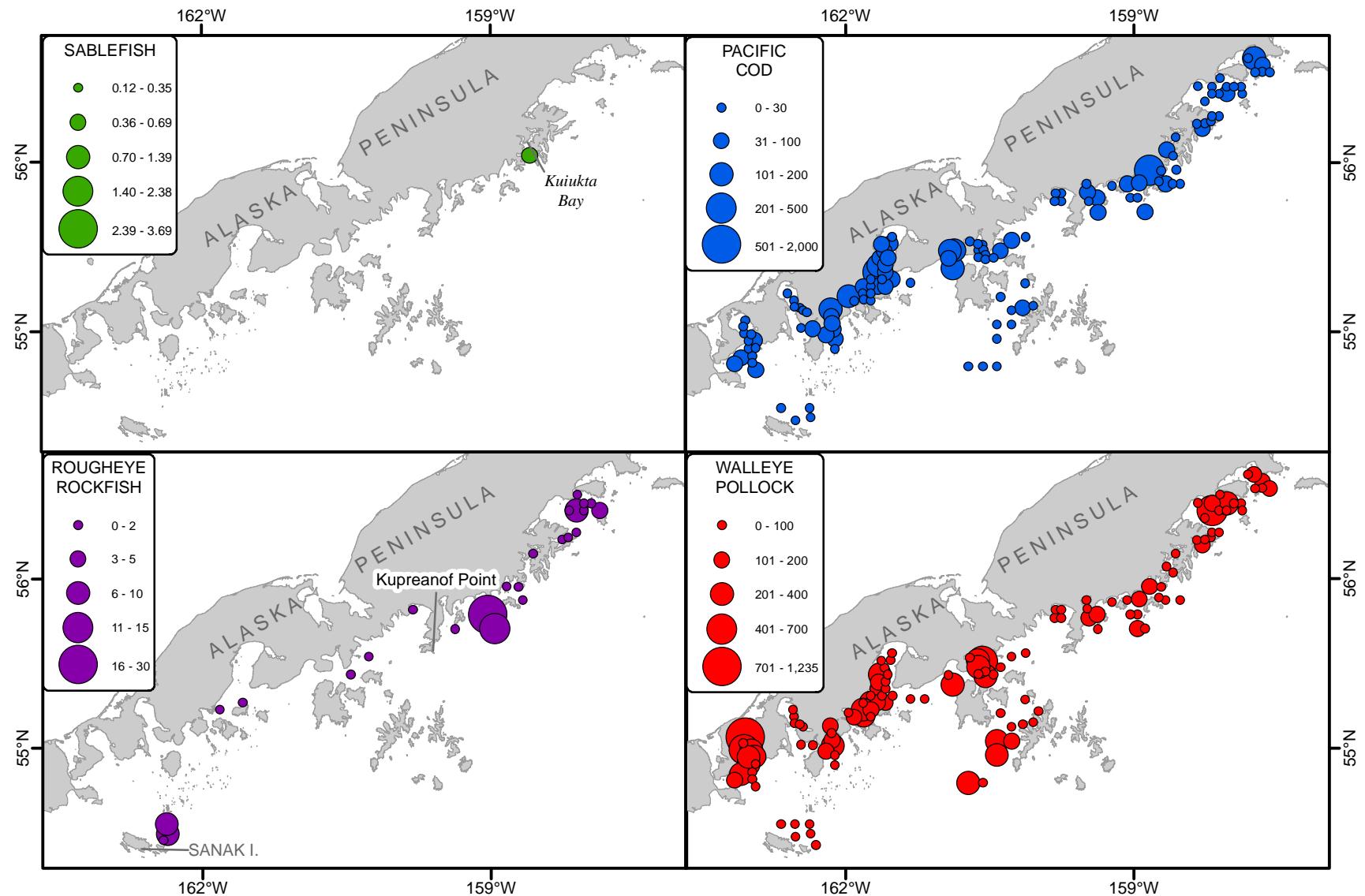


Figure 22.—Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2013 Chignik and South Alaska Peninsula areas bottom trawl survey.

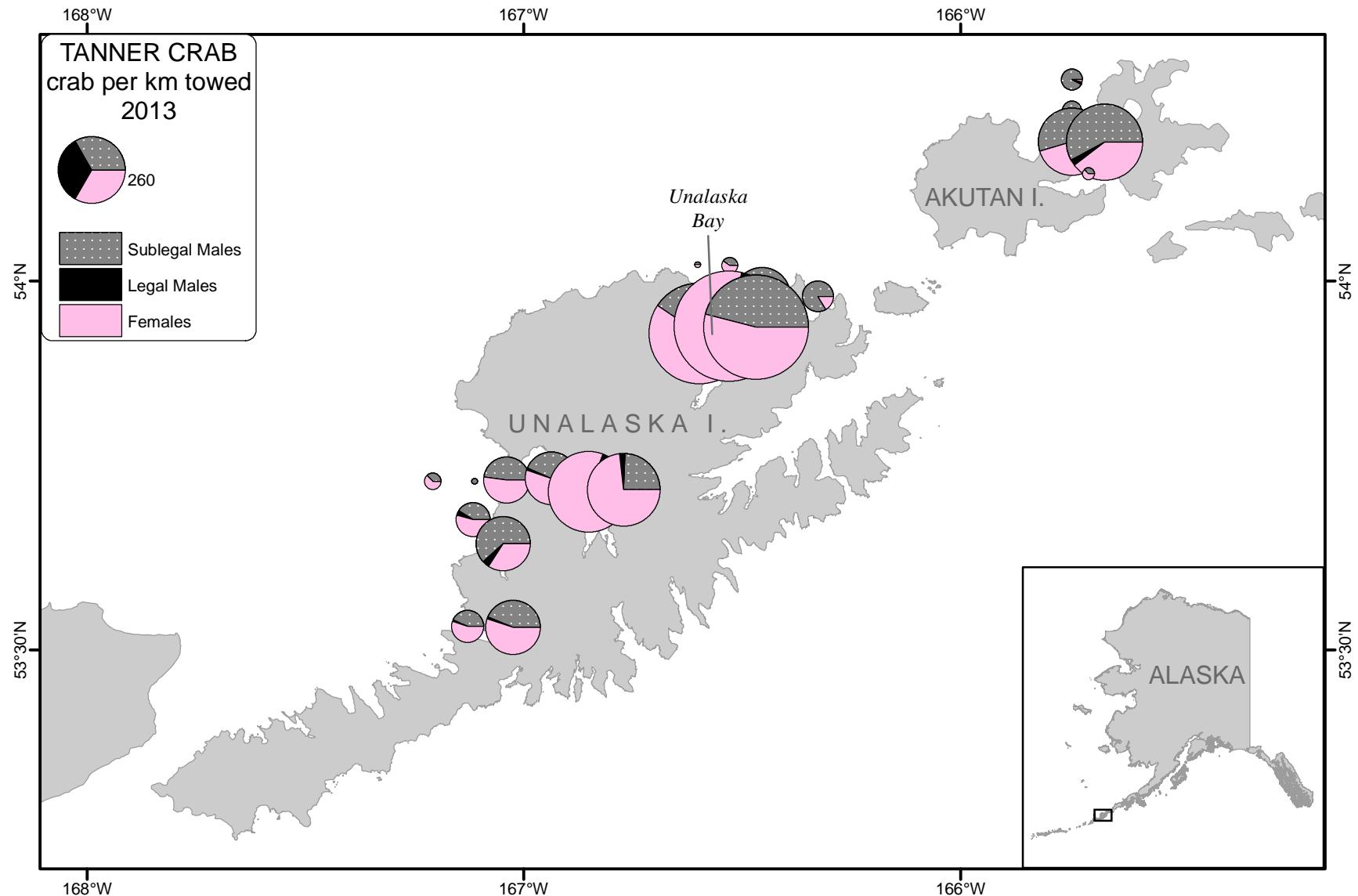


Figure 23.—Tanner crab per kilometer towed in the 2013 Eastern Aleutian District bottom trawl survey.

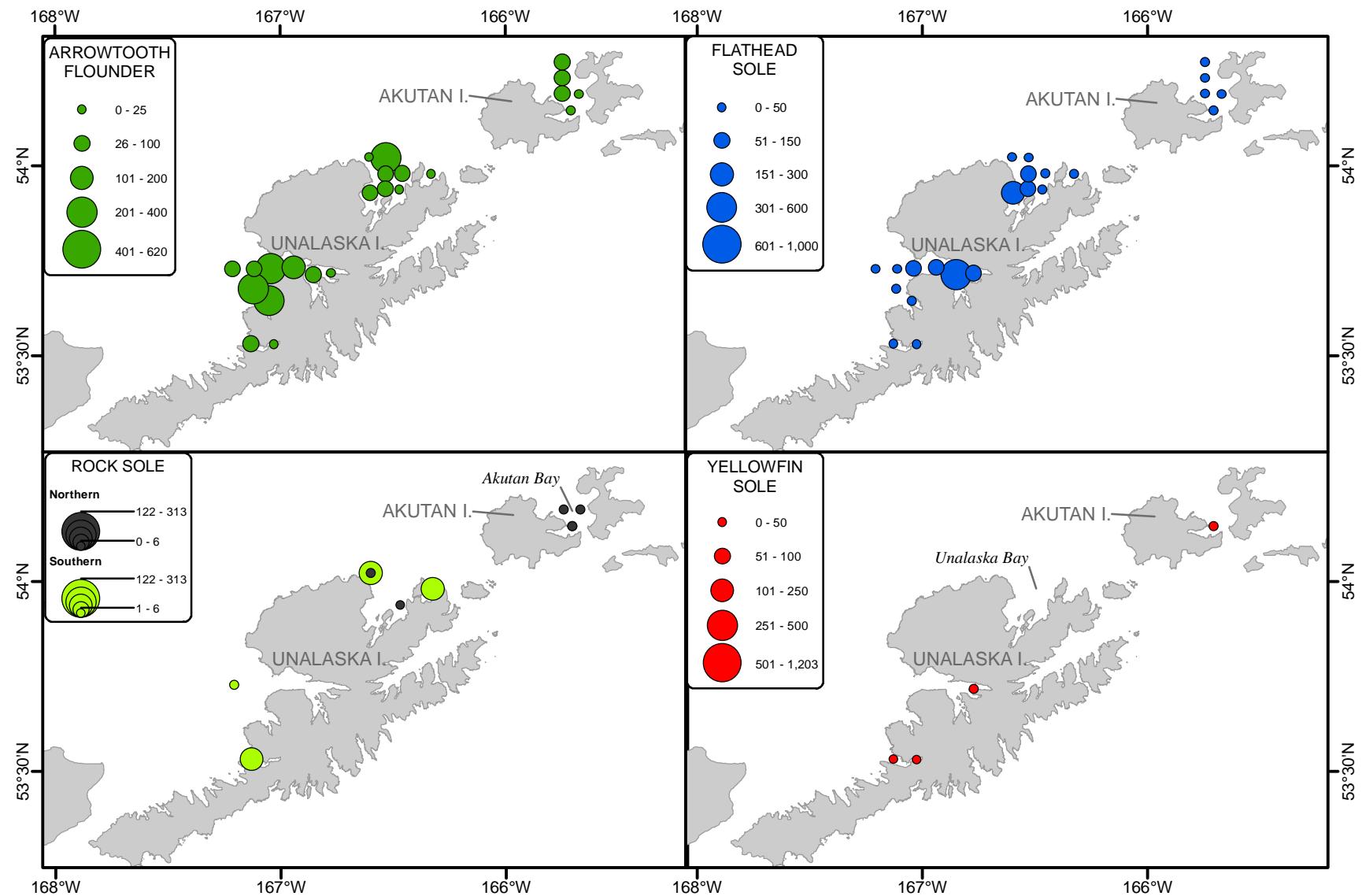


Figure 24.—Arrowtooth flounder, flathead sole, rock sole, and yellowfin sole catch in kilograms per kilometer towed from the 2013 Aleutian Islands District bottom trawl survey.

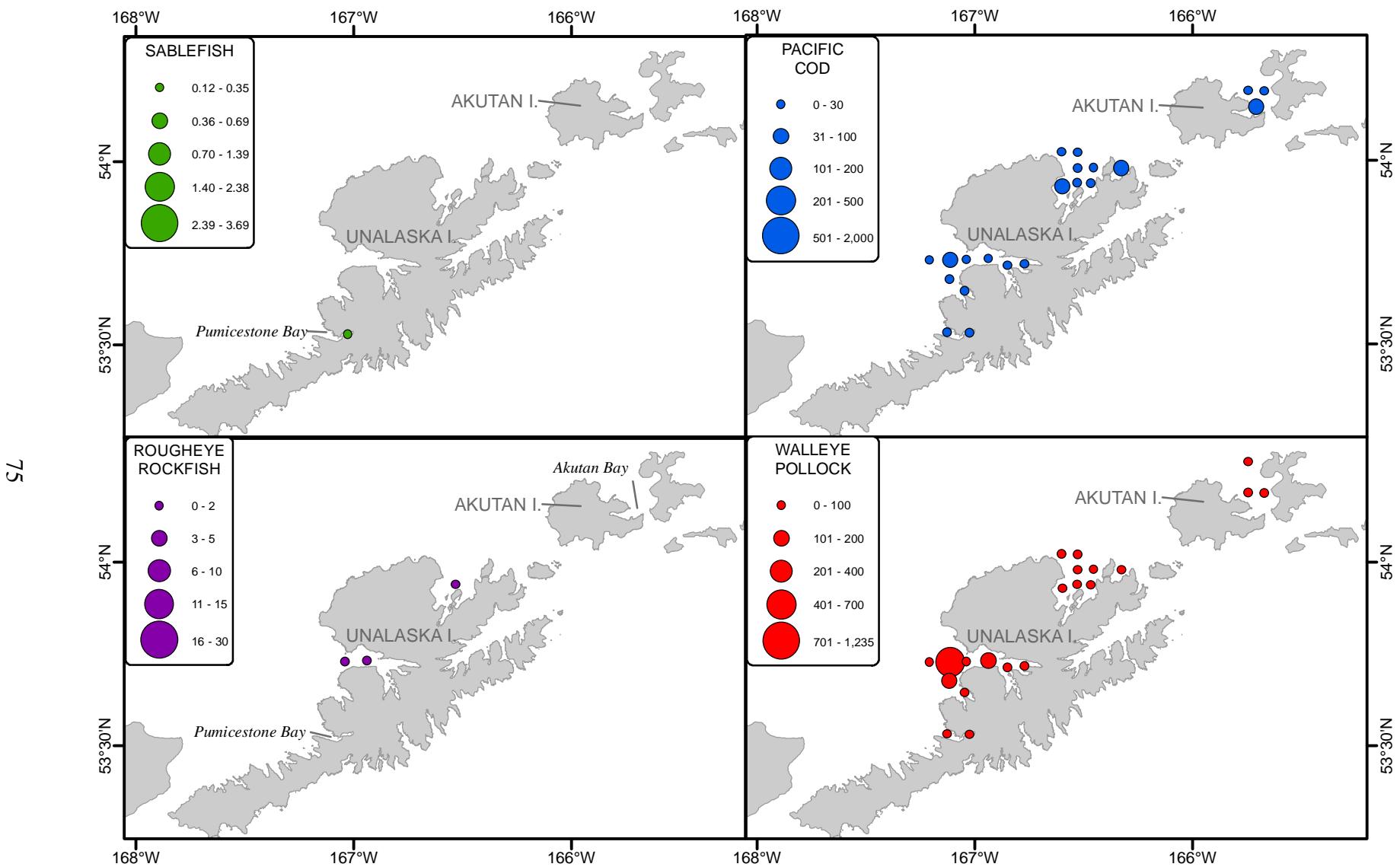


Figure 25.—Sablefish, Pacific cod, rougheye rockfish, and walleye pollock catch in kilograms per kilometer towed from the 2013 Aleutian Islands District bottom trawl survey.

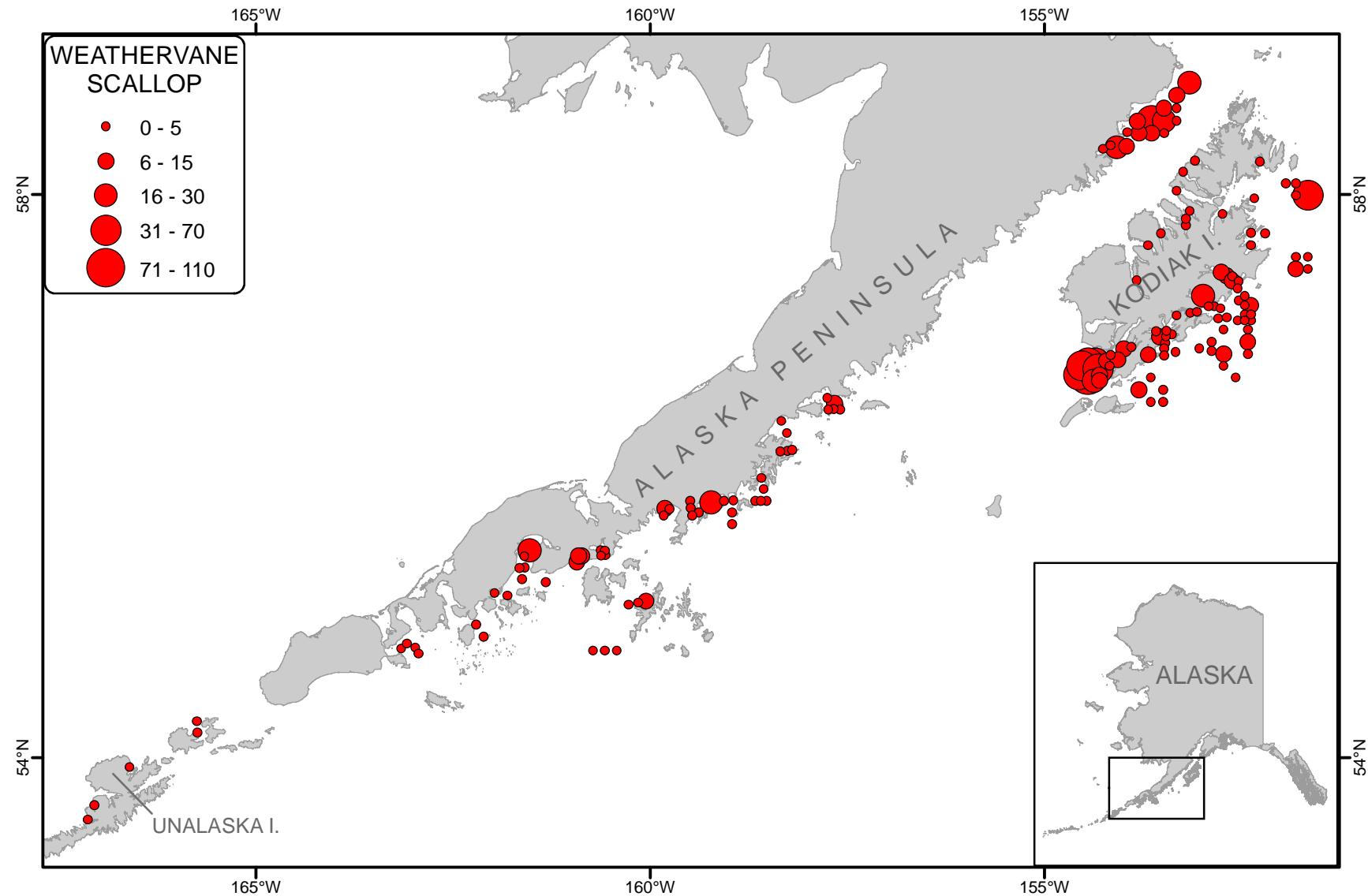


Figure 26.—Weathervane scallop catch in kilograms per kilometer towed from the 2013 bottom trawl survey.

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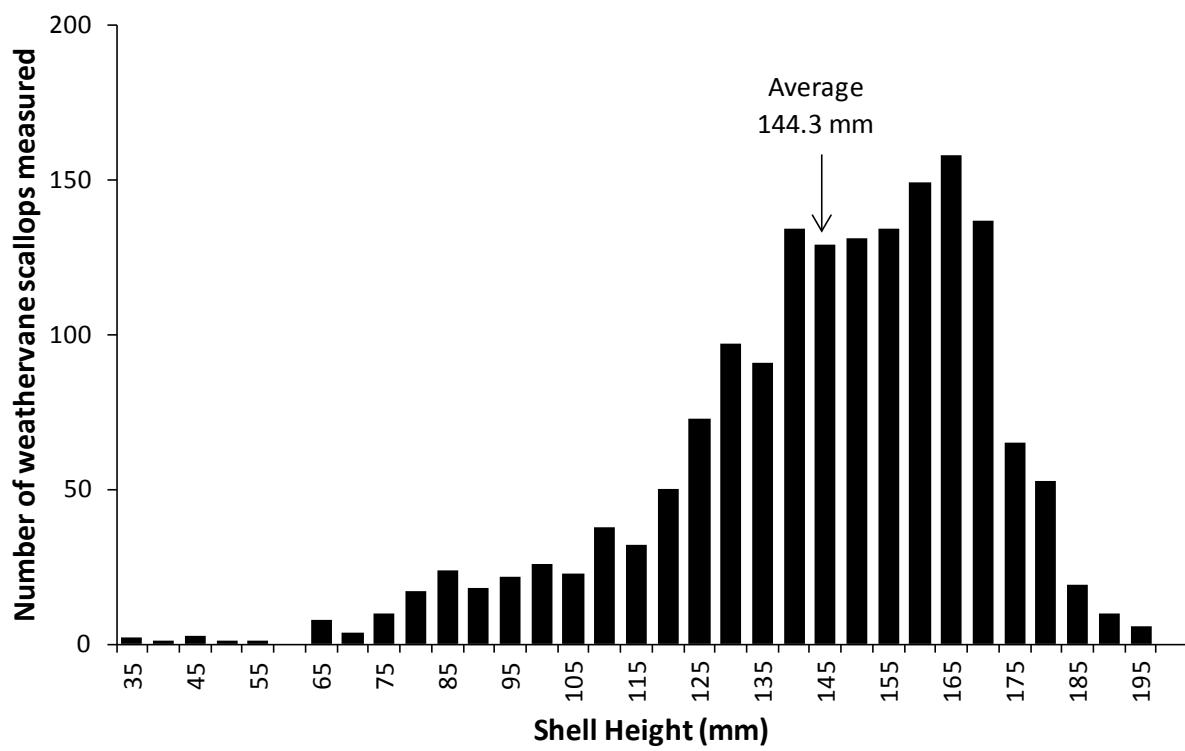


Figure 27.—Weathervane scallop shell height frequency from the 2013 bottom trawl survey.

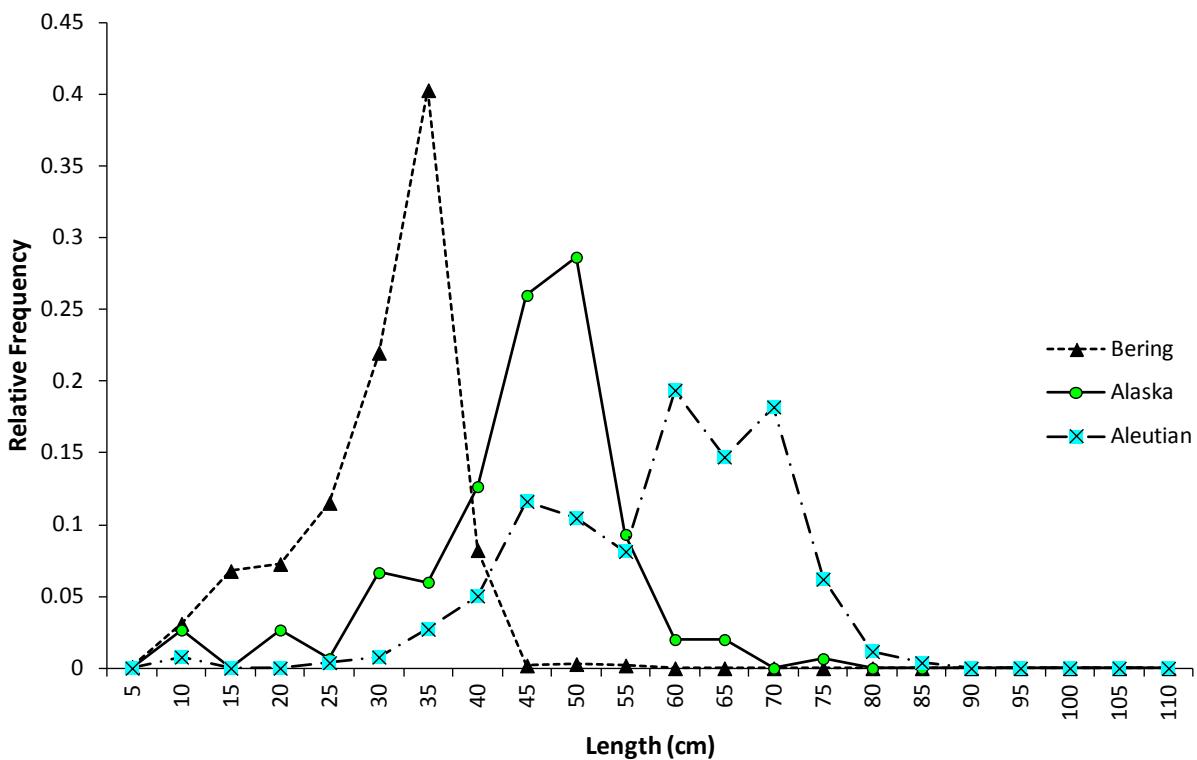
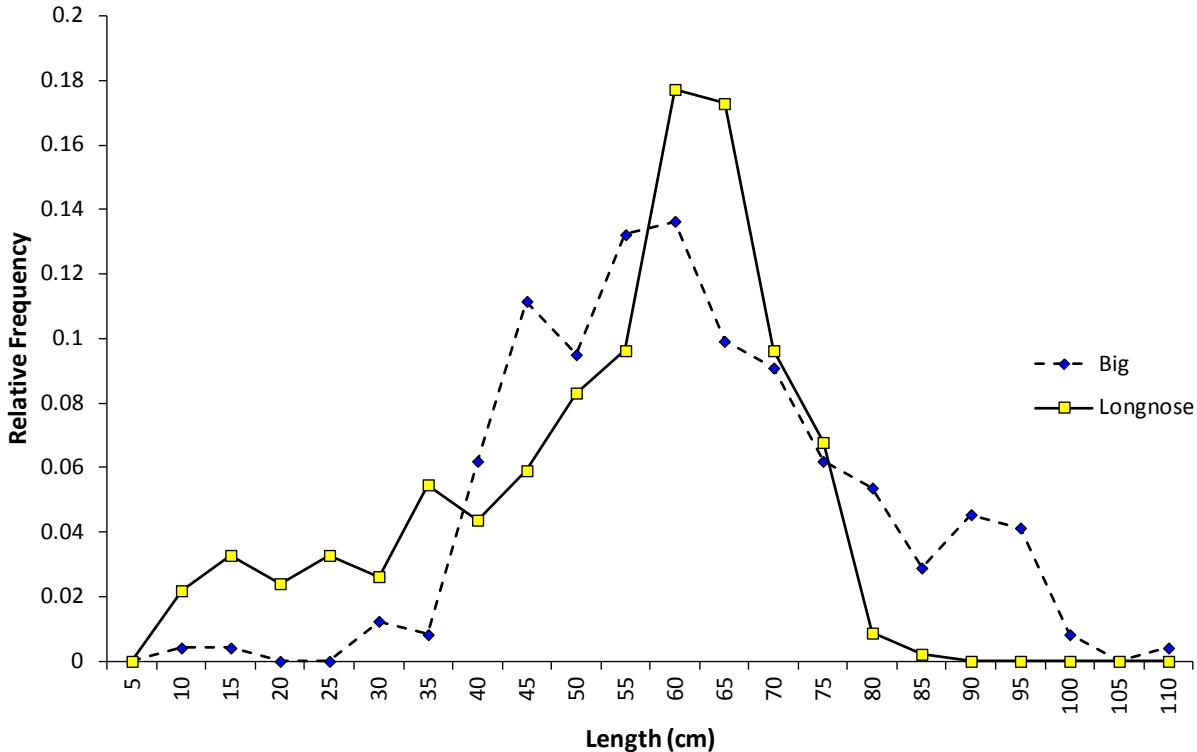


Figure 28.—Big, longnose, Bering, Alaska, and Aleutian skate relative size frequency (snout to wing notch) by species from the 2013 bottom trawl survey.

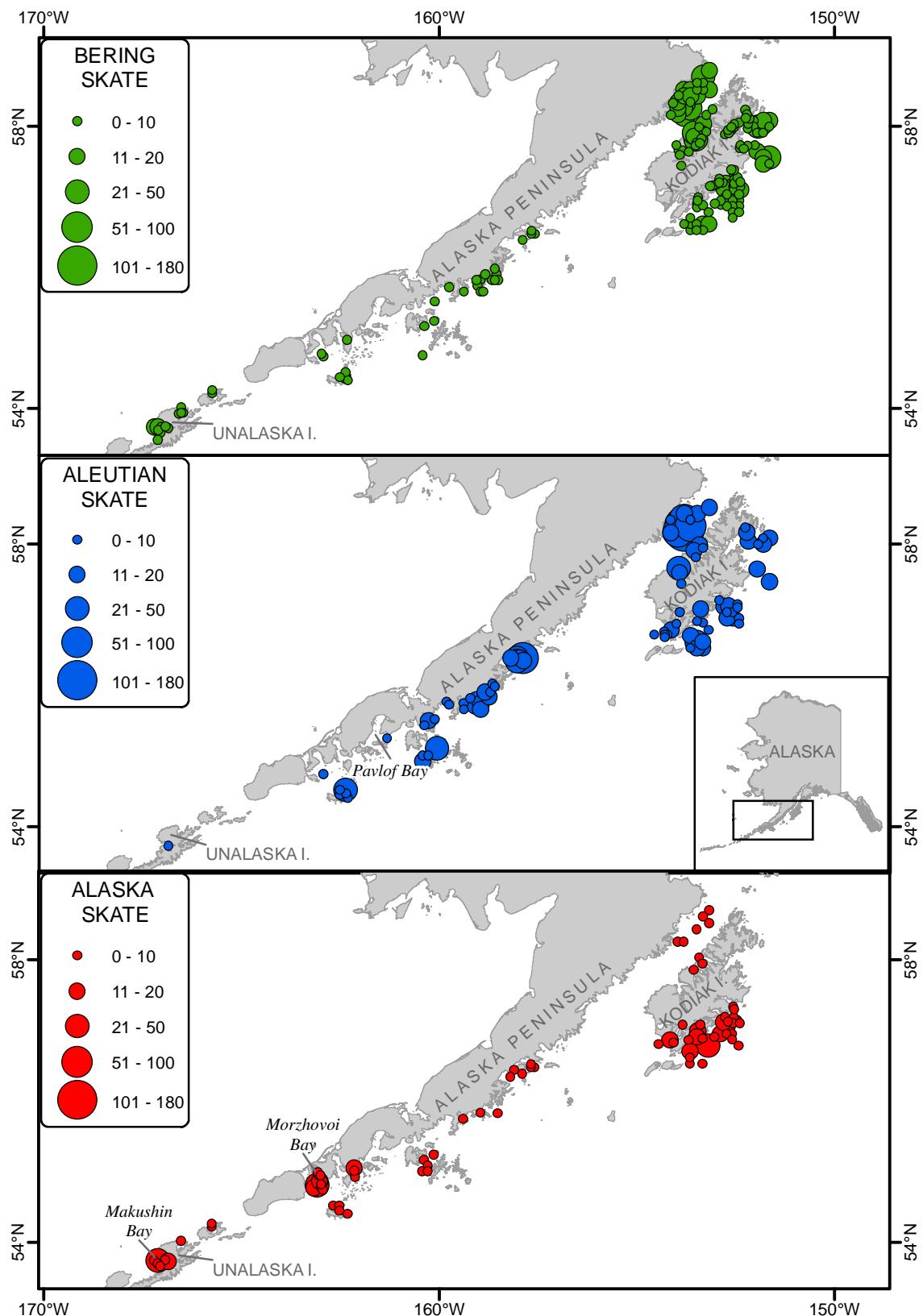


Figure 29.—Bering, Aleutian, and Alaska skate catch in kilograms per kilometer towed from the 2013 bottom trawl survey.

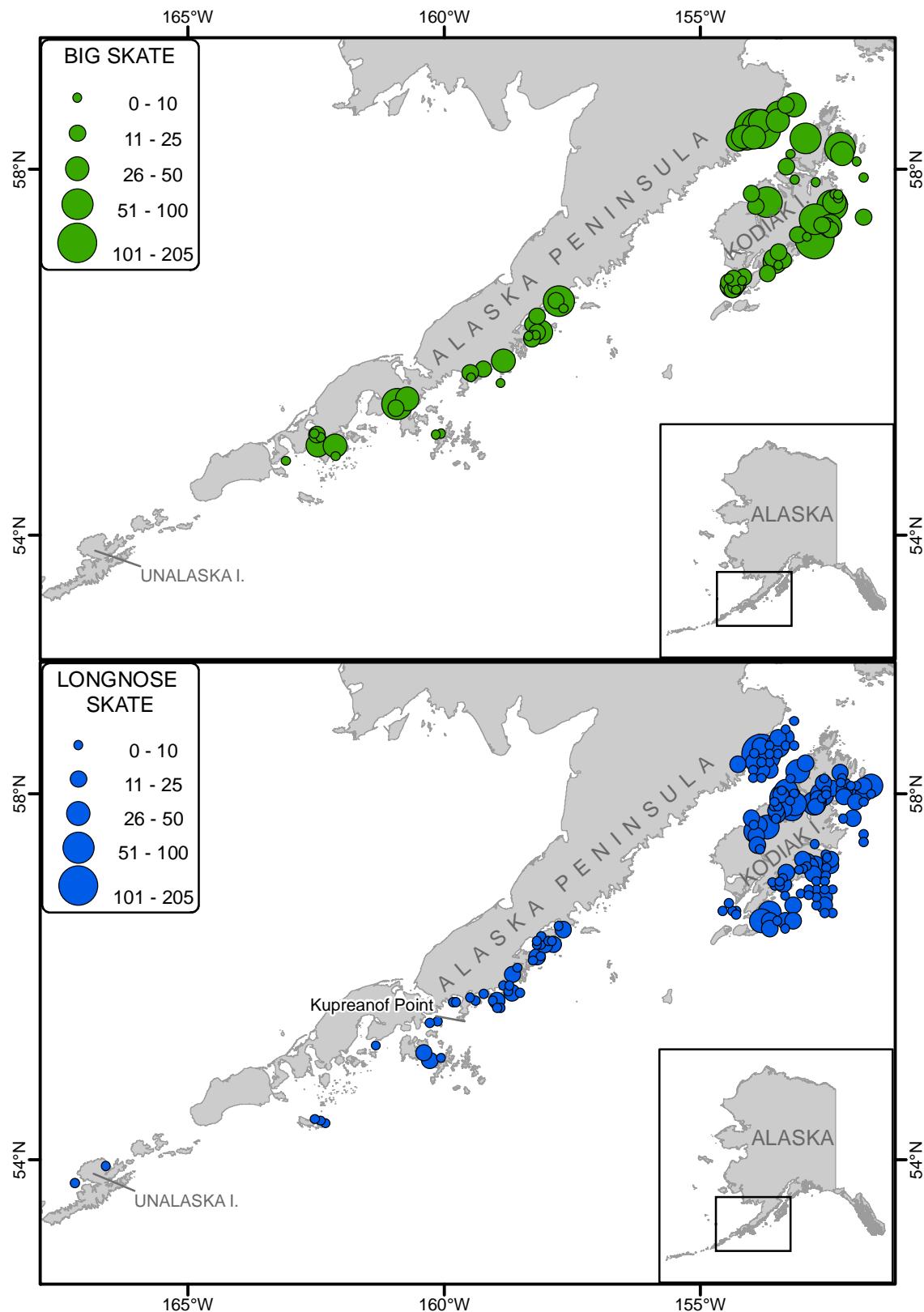


Figure 30.—Big and longnose skate catch in kilograms per kilometer towed from the 2013 bottom trawl survey.

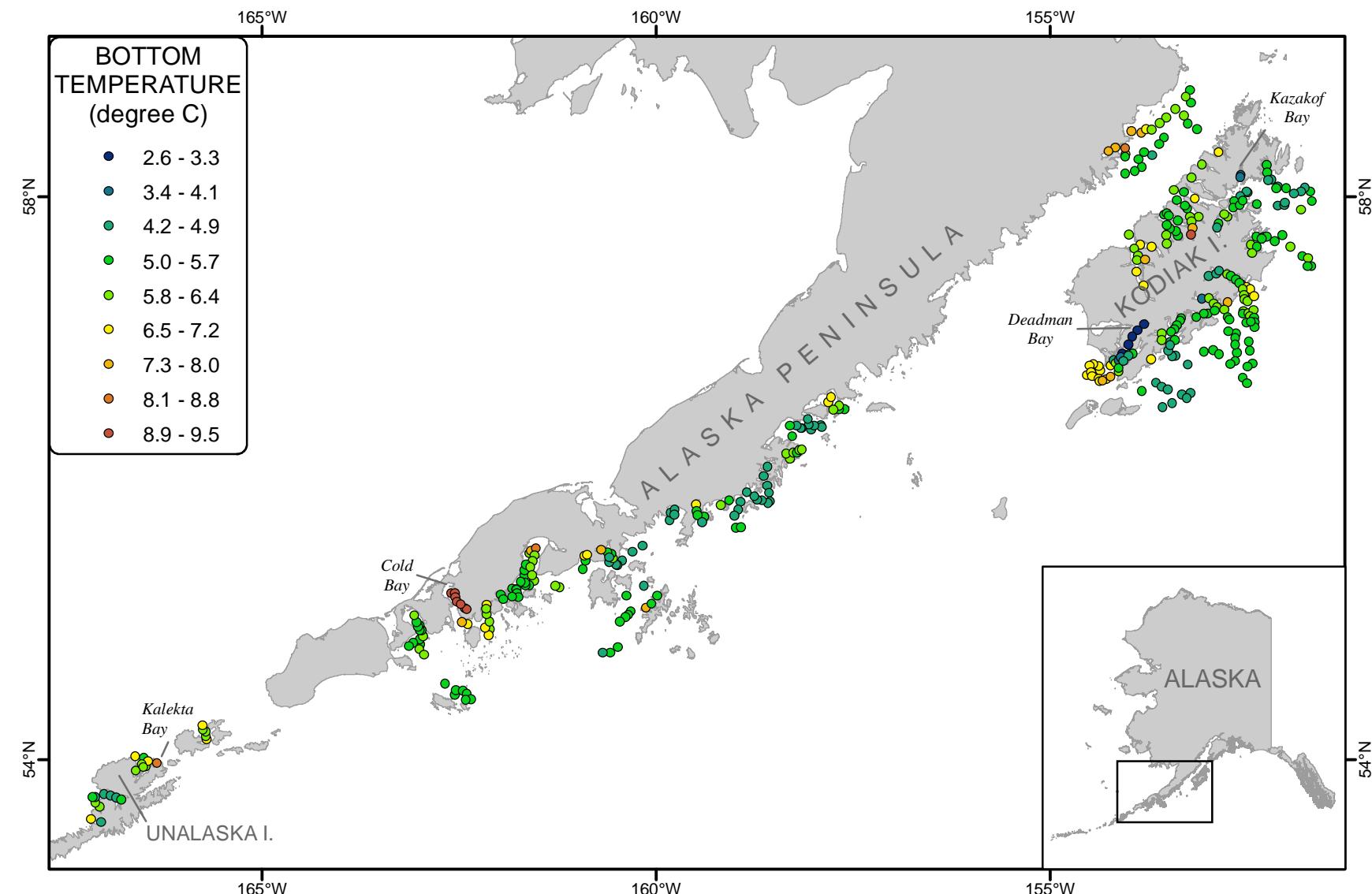


Figure 31.—Near-bottom water temperatures from the 2013 bottom trawl survey.



## **APPENDIX A. EXPLANATION OF TERMS**

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Appendix A1.—Explanation of Tanner crab and red king crab terms.

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The following definitions were developed for characterizing Tanner crab *Chionoecetes bairdi*.

Soft/New Pliable Shell	1) Exoskeleton is soft, flaccid, similar in texture to skin, and loses shape out of water. No scratches, abrasions, or epibionts are present. OR 2) Carapace and chelae are firm but thin and flexible and can be easily indented with slight thumb pressure. Legs are easily compressed when pinched. Colors are bright. Iridescence is common. Abdominal flap may appear translucent. Spines, chela tips, chela teeth, and dactyl tips are sharp. No scratches, abrasions, or epibionts are present.
New Shell	Carapace and chelae are hard and will crack when pressure is applied. Legs are not easily compressed when pinched and will break if bent. Colors are bright. Iridescence, particularly on the chelae, is often visible. Ventral surface can be any variation of white or pink. Spines, chela tips, chela teeth, and dactyl tips are sharp. Abdomen, coxae, and legs have few or no scratches and abrasions. Slight fouling may be present, including but not limited to leech egg cases, small barnacles, and encrusting bryozoans. On females, subtle grasping marks may be present on the first two pairs of legs.
Old Shell	Colors are dull. Iridescence on the chelae may be visible. Ventral surface typically appears yellow to brown. Spines, chela tips, chela teeth, and dactyl tips may show wear. Abdomen, coxae, and legs have few to numerous scratches and abrasions, which may be slightly darker than the shell. Slight fouling may be present, including but not limited to leech egg cases, barnacles, bryozoans, tubeworm casings, and anemones. On females, grasping marks are often present and discolored on the first two pairs of legs.
Very Old/Very Very Old Shell	1) Colors are dull and often dark on the dorsal surface. Ventral surface typically appears yellow to brown with darker areas. Spines, chela tips, chela teeth, and dactyl tips are worn. Legs are commonly damaged or missing. Abdomen, coxae, and legs have numerous scratches and abrasions, which are typically darker than the shell. Slight to moderate fouling is common, including but not limited to leech egg cases, large barnacles, bryozoans, hydrozoans, tubeworm casings, and anemones. On females, multiple grasping marks are often present and discolored on the first two pairs of legs. OR 2) Carapace may be soft and spongy because of decay. Colors are dark overall. Spines, chela tips, chela teeth, and dactyl tips are heavily worn. Legs are commonly damaged or missing. Moderate to extensive fouling is common.
Carapace Width (CW)	The straight-line distance across the carapace at a right angle to a line midway between the eyes to the posterior margin. For biological purposes this measure does not include spines. However, legal size is measured outside the spines.
Chela Height	Chela height is the greatest height on the right chela, excluding spines.

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Appendix A1.–Page 2 of 3.

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Prerecruit Male	Male Tanner crab below the minimum legal size limit.
Mature Male	Male Tanner crab $\geq 115$ mm CW.
Molting Mature Male	100% of new shell and 15% of old shell male Tanner crab that are $\geq 115$ mm CW.
Recruit Legal	Soft/new pliable or new shell male Tanner crab 140-164 mm CW outside lateral margin spines.
Postrecruit Legal	Old shell or very old/very very old shell male Tanner crab 140-164 mm outside lateral spines or males $\geq 165$ mm CW.
Total Legal	Male Tanner crab $> 139$ mm CW outside lateral spines.
Female	Identified as adult or immature female by visual observation of size of abdominal flap. Abdominal flap in mature female covers most of the ventral surface.
Primiparous Female	A new shell ovigerous female.

**The following definitions were developed for characterizing red king crab *Paralithodes camtschaticus*.**

Carapace Length (CL)	The straight-line distance along the carapace from the posterior margin of the right eye orbit to the medial-posterior margin of the carapace.
Legal Size	In the Kodiak registration area, king crab legal size is 7 inches (178 mm) or greater CW. In the Alaska Peninsula and Dutch Harbor Registration areas, legal size is 6.5 inches (165 mm CW). Measurement is made including lateral spines, as the straight-line distance across the carapace at a right angle to a line midway between the eyes to the midpoint of the posterior portion of the carapace.
Juvenile Female	Nonovigerous female king crab with CL $\leq 115$ mm in the Kodiak Registration Area or $\leq 99$ mm in the Alaska Peninsula and Dutch Harbor Registration areas, and that have not had a previous egg clutch.
Adult, Mature Female	Ovigerous or nonovigerous female king crab with CL $> 115$ mm in the Kodiak Registration Area, $> 99$ mm in the Alaska Peninsula and Dutch Harbor Registration areas.
Adult, Mature Male	Male king crab with CL $> 130$ mm Kodiak Registration Area, $> 115$ mm in the Alaska Peninsula and Dutch Harbor Registration areas.
New Shell Male	King crab that molted during the last year (generally January through April).
Old Shell Male	(Skip molt) King crab that failed to molt last year.
Very Old Shell Male	(Double Skip molt) King crab that failed to molt during the last two or more years.

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Prerecruit IV	King crab estimated to be 4 or more years from legal size and < 95 mm CL in the Kodiak Registration area, < 79 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Prerecruit III	King crab estimated to be 3 years from legal size and 95-112 mm CL in the Kodiak Registration area, and 79-95 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Prerecruit II	King crab estimated to be 2 years from legal size and 113-130 mm CL in the Kodiak Registration area, and 96-115 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Prerecruit I	King crab estimated to be 1 year from legal size, which includes all undersized crab > 130 mm CL in the Kodiak Registration area, and > 115 mm CL in the Alaska Peninsula.
Recruits	Soft and new shell male king crab which are legal size and are in their first year of availability to the fishery; includes crab ≤ 164 mm CL in the Kodiak Registration area, and ≤ 152 mm CL in the Alaska Peninsula and Dutch Harbor Registration areas.
Postrecruit	Male king crab which are legal size and old shell or very old shell or soft and new shell male king crab which are of greater length than recruit crab.

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## **APPENDIX B. FISHING LOG AND TRAWL STATIONS FISHED**

Appendix B1.—2013 bottom trawl survey fishing log.

Haul	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Location	N.E.KOD													
Month/Day/Year	6/13/2013	6/13/2013	6/13/2013	6/13/2013	6/13/2013	6/14/2013	6/14/2013	6/14/2013	6/14/2013	6/18/2013	6/18/2013	6/18/2013	6/18/2013	6/18/2013
Station	CHJ	CHK	CHL	369X	CHG	CHE	CHF	CHB	CHA	MOGX	313	314	285	257
Longitude Start (°W)	152.3815	152.3003	152.2525	152.055	152.1485	152.4522	152.3183	152.3717	152.4363	152.1122	152.0288	151.8173	151.6758	151.6943
Latitude Start (°N)	57.729	57.7262	57.7287	57.7403	57.6978	57.6747	57.716	57.6608	57.6147	57.9387	57.9408	57.9103	57.9688	58.0337
Heading, Degrees	132	281	80	172	201	40	102	38	38	73	115	8	26	349
Average Depth (m)	98.75	144.4	179.2	104.2	142.6	14.62	149.9	113.3	45.71	157.2	199.3	56.69	100.5	151.7
Distance Fished (km)	1.85	1.85	1.85	1.11	1.11	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.3	5.16	5.42	5.62	5.61	6.35	5.17	5.17	6.27	4.46	4.39	5.85	5.28	4.89
Haul	15	16	19	20	21	23	24	25	26	27	28	29	30	31
Location	N.E.KOD													
Month/Day/Year	6/19/2013	6/19/2013	6/19/2013	6/19/2013	6/19/2013	6/19/2013	6/19/2013	6/20/2013	6/20/2013	6/20/2013	6/20/2013	6/20/2013	6/20/2013	6/20/2013
Station	255X	255	256	284	283	283X	MOX	MOXX	MOLX	MOQ	MOPX	MOEX	MONX	KZO
Longitude Start (°W)	152.1148	152.0035	151.7692	151.8142	151.9062	152.021	152.2515	152.2483	152.1865	152.1313	152.2342	152.3753	152.4897	152.5067
Latitude Start (°N)	58.0663	58.0568	58.0595	58.0313	58.0198	57.9588	58.2123	58.1617	58.1153	58.0578	58.1118	57.9477	58.0262	58.0333
Heading, Degrees	143	106	140	250	240	233	166	166	150	171	225	83	352	239
Average Depth (m)	159	126.1	162.7	151.7	168.2	190.1	137.1	160.9	195.6	155.4	164.5	124.3	192	193.8
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.66	1.85	1.48	1.48	1.66
Bottom Temp. (°C)	4.85	4.97	4.71	4.6	4.46	4.39	4.98	4.96	4.82	5	4.74	5.21	4.67	4.69
Haul	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Location	N.E.KOD													
Month/Day/Year	6/21/2013	6/21/2013	6/21/2013	6/21/2013	6/21/2013	6/21/2013	6/21/2013	6/21/2013	6/21/2013	6/22/2013	6/22/2013	6/27/2013	6/27/2013	6/27/2013
Station	KZS	KZR	KZJ	KZF	KZE	KZC	KZD	KZB	KZA	KZG	KZK	395	420	421
Longitude Start (°W)	152.5822	152.588	152.5852	152.6607	152.6757	152.745	152.7922	152.8623	152.8773	152.5947	152.556	151.9543	151.8008	151.7285
Latitude Start (°N)	58.1455	58.1327	58.0025	57.9667	57.9253	57.8628	57.8813	57.8183	57.7918	57.9407	57.9705	57.6613	57.5952	57.5805
Heading, Degrees	192	180	176	220	212	49	38	207	17	322	26	315	149	123
Average Depth (m)	100.5	113.3	138.9	124.3	102.4	64	85.94	60.34	43.88	122.5	155.4	195.6	144.4	124.3
Distance Fished (km)	1.11	1.11	1.85	1.48	1.29	1.11	1.11	0.92	0.92	1.85	1.48	1.85	1.85	1.85
Bottom Temp. (°C)	4.02	3.98	4.79	5.36	5.54	6.03	5.76	4.9	4.86	5.4	4.95	5.68	5.58	5.68
Haul	46	47	48	49	50	51	52	53	54	55	56	57	58	59
Location	N.E.KOD	N.E.KOD	E.KOD											
Month/Day/Year	6/27/2013	6/27/2013	6/28/2013	6/28/2013	6/28/2013	6/28/2013	6/28/2013	6/28/2013	6/28/2013	6/28/2013	6/28/2013	6/29/2013	6/29/2013	6/29/2013
Station	444	443	UGAC	UGAB	UGAA	UGB	UGC	UGD	UGF	UGG	UGJ	UGE	UGI	UGM
Longitude Start (°W)	151.6845	151.7355	152.9875	152.8912	152.8513	152.7545	152.7042	152.6413	152.5685	152.5077	152.4592	152.597	152.5545	152.5412
Latitude Start (°N)	57.5253	57.5283	57.4613	57.4763	57.4955	57.473	57.4602	57.4373	57.4028	57.385	57.3718	57.4135	57.3718	57.3292
Heading, Degrees	296	265	48	84	120	156	110	128	173	80	189	165	158	186
Average Depth (m)	160.9	146.2	36.57	65.83	78.63	87.77	89.6	96.92	87.77	65.83	69.49	95.09	95.09	100.5
Distance Fished (km)	1.48	1.48	0.92	1.11	1.11	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Bottom Temp. (°C)	5.58	5.65	4.41	4.24	4.13	5.86	5.56	5.15	6.48	6.56	6.64	5.32	5.9	5.92

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Appendix B1.–Page 2 of 7.

Haul	60	61	62	63	64	65	66	67	68	69	70	71	72	73
Location	E.KOD	E.KOD	E.KOD											
Month/Day/Year	6/29/2013	6/29/2013	6/29/2013	6/29/2013	6/30/2013	6/30/2013	6/30/2013	6/30/2013	6/30/2013	6/30/2013	6/30/2013	6/30/2013	7/1/2013	7/1/2013
Station	510B	486A	486B	KLD	KLA	KLB	KLC	KLG	KLI	KLL	533A	533B	KLH	KLF
Longitude Start (°W)	152.535	152.4957	152.412	152.7472	153.0718	152.982	152.9262	153.0027	152.8787	152.7898	152.7455	152.7237	152.9118	153.0463
Latitude Start (°N)	57.302	57.2898	57.3245	57.2798	57.306	57.31	57.2723	57.203	57.2455	57.2293	57.1782	57.161	57.2222	57.2015
Heading, Degrees	163	358	169	201	82	147	149	42	134	133	205	28	248	260
Average Depth (m)	100.5	98.75	65.83	25.6	93.26	82.29	95.09	117	113.3	133.4	142.6	137.1	131.6	122.5
Distance Fished (km)	1.29	1.29	1.29	1.48	1.11	1.85	1.85	1.85	1.85	1.66	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.91	6.14	6.69	7.36	3.9	6.09	5.88	5.41	5.83	5.7	5.35	5.28	5.46	5.34
Haul	74	75	76	77	78	79	80	81	82	83	84	85	86	87
Location	E.KOD	S.E.KOD	S.E.KOD	S.E.KOD										
Month/Day/Year	7/1/2013	7/1/2013	7/1/2013	7/1/2013	7/1/2013	7/1/2013	7/2/2013	7/2/2013	7/2/2013	7/2/2013	7/2/2013	7/2/2013	7/2/2013	7/2/2013
Station	KLE	THN	THM	THL	THK	THJ	THI	THF	THG	THH	615	614	THC	THD
Longitude Start (°W)	153.1423	153.3337	153.3482	153.3908	153.4262	153.4608	153.5858	153.5832	153.4742	153.4165	153.4137	153.4513	153.498	153.4762
Latitude Start (°N)	57.1757	57.1693	57.1535	57.1222	57.0947	57.0763	57.0672	57.0213	57.007	57.0192	56.911	56.9083	56.9473	56.9848
Heading, Degrees	58	201	214	206	12	175	117	72	54	354	180	333	3	195
Average Depth (m)	115.2	109.7	118.8	122.5	120.6	113.3	95.09	76.8	122.5	113.3	140.8	142.6	131.6	129.8
Distance Fished (km)	1.85	1.48	1.48	1.48	1.48	1.48	1.48	1.29	1.48	1.48	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.45	5.19	5.05	5.01	4.9	4.93	5.68	5.68	4.68	5.19	4.56	4.53	4.59	4.67
Haul	88	89	90	91	92	93	94	95	96	97	98	99	100	101
Location	S.E.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD	S.W.KOD							
Month/Day/Year	7/3/2013	7/3/2013	7/3/2013	7/3/2013	7/3/2013	7/3/2013	7/3/2013	7/3/2013	7/4/2013	7/4/2013	7/4/2013	7/4/2013	7/4/2013	7/4/2013
Station	THA	688	726	727	728	729	761	760	759	ALR	ALQ	ALP	ALO	ALL
Longitude Start (°W)	153.7177	153.6565	153.5875	153.5062	153.3308	153.2222	153.2643	153.4523	153.5693	153.8058	153.8923	153.9555	154.0053	154.0857
Latitude Start (°N)	56.8863	56.7208	56.695	56.6757	56.6415	56.6525	56.6155	56.5812	56.5533	57.127	57.0868	57.0442	56.9898	56.925
Heading, Degrees	66	118	157	142	56	91	258	210	226	213	226	216	211	52
Average Depth (m)	49.37	149.9	153.6	148.1	144.4	146.2	138.9	131.6	144.4	113.3	171.8	155.4	137.1	85.94
Distance Fished (km)	1.11	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.85	1.85	1.85	1.85	1.48
Bottom Temp. (°C)	6.89	4.51	4.49	4.48	4.24	4.22	4.24	4.29	4.5	2.7	2.56	2.59	2.61	2.99
Haul	102	103	104	105	106	107	108	109	110	111	112	113	114	115
Location	S.W.KOD	S.W.KOD	S.W.KOD											
Month/Day/Year	7/4/2013	7/5/2013	7/5/2013	7/5/2013	7/5/2013	7/5/2013	7/5/2013	7/5/2013	7/6/2013	7/6/2013	7/6/2013	7/6/2013	7/6/2013	7/6/2013
Station	ALM	646D	646B	646A	645B	682B	646C	683A	684A	683B	683D	684C	684B	ALA
Longitude Start (°W)	153.9945	154.3645	154.3828	154.4505	154.5005	154.5327	154.4795	154.4662	154.2908	154.3828	154.3718	154.3317	154.2318	154.1305
Latitude Start (°N)	56.9233	56.8075	56.8397	56.852	56.8407	56.7765	56.7968	56.7685	56.7458	56.7505	56.7325	56.7377	56.7637	56.801
Heading, Degrees	41	306	351	144	182	130	6	131	252	108	110	91	66	197
Average Depth (m)	65.83	53.03	58.51	64	67.66	71.31	65.83	64	60.34	65.83	73.14	67.66	73.14	58.51
Distance Fished (km)	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.48	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	4.81	6.99	6.97	6.92	7.13	6.92	6.95	7.1	7.2	7.17	7.21	7.62	7.89	6.13

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Appendix B1.–Page 3 of 7.

Haul	116	117	118	119	120	121	122	123	124	125	126	127	128	129
Location	S.W.KOD	S.E.KOD	S.E.KOD	S.E.KOD	S.E.KOD	E.KOD								
Month/Day/Year	7/6/2013	7/6/2013	7/6/2013	7/7/2013	7/7/2013	7/7/2013	7/7/2013	7/7/2013	7/7/2013	7/8/2013	7/8/2013	7/8/2013	7/8/2013	7/9/2013
Station	ALB	ALD	ALF	ALH	ALI	ALC	ALK	ALJ	ALG	725	651	585X	586	510C
Longitude Start (°W)	154.2287	154.1902	154.1692	154.1295	154.1012	154.1283	153.9518	154.0047	154.0707	153.8315	153.2507	153.045	152.9283	152.5468
Latitude Start (°N)	56.8428	56.8802	56.8583	56.8807	56.8997	56.8242	56.927	56.913	56.8733	56.6668	56.8475	56.9412	56.9507	57.2183
Heading, Degrees	113	170	22	30	30	16	63	226	227	52	116	70	56	210
Average Depth (m)	40.23	56.69	56.69	64	78.63	67.66	69.49	73.14	58.51	100.5	175.5	135.3	128	91.43
Distance Fished (km)	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	6.93	4.88	5.71	4.02	3.43	5.13	5.09	4.69	4.73	5.49	4.52	5.48	5.39	5.81
Haul	130	131	132	133	134	135	136	137	138	141	142	143	144	145
Location	E.KOD													
Month/Day/Year	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/9/2013	7/10/2013	7/10/2013	7/10/2013	7/10/2013	7/10/2013	7/10/2013	7/11/2013
Station	534B	511A	511B	535A	535B	535D	561	534D	535C	589	621	656	655	620
Longitude Start (°W)	152.5507	152.4807	152.416	152.4652	152.4145	152.4082	152.4043	152.5067	152.4512	152.4778	152.4653	152.431	152.4987	152.6287
Latitude Start (°N)	57.1998	57.2033	57.225	57.1853	57.1737	57.1438	57.1075	57.1405	57.1475	57.009	56.9478	56.8543	56.8363	56.9318
Heading, Degrees	180	30	144	163	164	174	188	44	162	358	205	187	291	150
Average Depth (m)	100.5	104.2	78.63	137.1	128	140.8	144.4	128	149.9	140.8	155.4	168.2	159	151.7
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	5.42	6.07	6.43	6.05	5.34	5.22	5.23	5.24	5.24	5.22	5.3	5.29	5.29	5.25
Haul	148	149	153	154	160	161	162	163	164	165	166	167	168	169
Location	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	E.KOD	S.E.KOD	E.KOD	KUJULIK	KUJULIK	KUJULIK	KUJULIK	KUJULIK	KUJULIK
Month/Day/Year	7/11/2013	7/11/2013	7/12/2013	7/12/2013	7/12/2013	7/13/2013	7/13/2013	7/13/2013	7/27/2013	7/27/2013	7/27/2013	7/27/2013	7/27/2013	7/27/2013
Station	695	696	560	559	619	588	587	618A	654	4308	4302	4301	4298	4290
Longitude Start (°W)	152.556	152.5015	152.6417	152.7407	152.6518	152.6517	152.6522	152.8548	152.7132	157.6117	157.6758	157.6737	157.751	157.8187
Latitude Start (°N)	56.756	56.7202	57.0652	57.0792	56.875	57.034	56.9877	56.923	56.8535	56.5385	56.5402	56.564	56.5343	56.59
Heading, Degrees	177	102	162	19	358	128	228	14	317	151	123	132	79	327
Average Depth (m)	140.8	170	149.9	153.6	137.1	151.7	149.9	118.8	98.75	131.6	100.5	100.5	87.77	27.43
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.48	1.85	1.85	1.85	1.85	1.11
Bottom Temp. (°C)	5.17	5.22	5.27	5.26	5.29	5.3	5.32	5.39	5.63	5.33	5.57	5.69	6.17	7.13
Haul	170	171	172	173	174	175	176	177	178	179	180	181	182	183
Location	KUJULIK	CHIGNIK												
Month/Day/Year	7/27/2013	7/27/2013	7/27/2013	7/28/2013	7/28/2013	7/28/2013	7/28/2013	7/28/2013	7/28/2013	7/28/2013	7/28/2013	7/29/2013	7/29/2013	7/29/2013
Station	4296	4286	4287	4278	4282	4277	4272	4274	4267	4266	4256	4262	4265	4964
Longitude Start (°W)	157.7757	157.9135	157.9013	158.0352	157.9955	158.0583	158.0692	158.1465	158.1625	158.2172	158.3022	158.2702	158.306	158.345
Latitude Start (°N)	56.6235	56.4265	56.4128	56.393	56.4215	56.4298	56.468	56.4055	56.4037	56.4218	56.4207	56.3482	56.1912	56.2247
Heading, Degrees	147	111	249	302	101	167	183	97	322	94	284	140	32	99
Average Depth (m)	64	159	195.6	192	197.5	179.2	142.6	149.9	144.4	151.7	95.09	76.8	58.51	71.31
Distance Fished (km)	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.48	1.85	1.85	1.48
Bottom Temp. (°C)	6.87	4.79	4.75	4.64	4.63	4.62	4.62	4.54	4.35	4.34	5.15	5.56	5.83	5.93

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Appendix B1.–Page 4 of 7.

Haul	184	185	186	187	188	189	190	191	192	193	194	195	196	197
Location	CHIGNIK	CHIGNIK	CHIGNIK	CHIGNIK	MITRO.									
Month/Day/Year	7/29/2013	7/29/2013	7/29/2013	7/29/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013	7/30/2013
Station	4264	4271	4270	4312	4063	4048	4064	4065	4068	4067	4066	4095	4049	4035
Longitude Start (°W)	158.26	158.2133	158.1838	158.1507	158.582	158.6338	158.5932	158.5655	158.5535	158.5765	158.6563	158.7207	158.7502	158.8445
Latitude Start (°N)	56.2345	56.2332	56.2507	56.2548	56.1325	56.0638	55.9965	55.9477	55.8857	55.875	55.8922	55.8952	55.9205	55.9522
Heading, Degrees	205	67	67	79	226	188	344	177	171	318	277	312	307	112
Average Depth (m)	76.8	95.09	102.4	128	153.6	166.4	149.9	106	120.6	117	124.3	138.9	144.4	142.6
Distance Fished (km)	1.48	1.48	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85	1.48
Bottom Temp. (°C)	5.75	5.64	5.67	5.67	4.7	4.81	4.78	4.73	4.84	4.81	4.76	4.79	4.82	4.86
Haul	198	199	200	201	202	203	204	205	206	207	208	209	210	211
Location	IVANOF	MITRO.	MITRO.	IVANOF	STEP.	STEP.	STEP.	STEP.						
Month/Day/Year	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/1/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/2/2013	8/3/2013
Station	4036	4037	4025	4024	4915	4007	4900	400X	4000	4008	STD	STA	STB	STE
Longitude Start (°W)	158.9315	158.9587	159.005	159.073	159.18	159.3923	159.4967	159.4867	159.4768	159.4198	159.826	159.8148	159.763	159.7703
Latitude Start (°N)	55.8827	55.8268	55.784	55.8925	55.8617	55.7778	55.8627	55.8178	55.7885	55.7373	55.7527	55.808	55.8283	55.7918
Heading, Degrees	171	185	354	128	212	198	71	155	131	166	21	7	173	182
Average Depth (m)	129.8	129.8	124.3	96.92	65.83	91.43	38.4	71.31	82.29	102.4	120.6	100.5	109.7	120.6
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	0.92	1.85	1.85	1.85	1.85	1.48	1.85	1.85
Bottom Temp. (°C)	4.76	4.75	4.75	5.19	5.98	5.11	6.6	5.1	4.97	4.74	4.21	4.46	4.22	4.31
Haul	212	213	214	215	216	217	218	219	220	221	222	223	224	225
Location	STEP.	BEAVER	BEAVER	W.NAGAI										
Month/Day/Year	8/3/2013	8/3/2013	8/3/2013	8/3/2013	8/3/2013	8/4/2013	8/4/2013	8/4/2013	8/4/2013	8/4/2013	8/4/2013	8/4/2013	8/4/2013	8/5/2013
Station	368A	348	329B	371	393	353	354	334	335	337	318	301	373A	373B
Longitude Start (°W)	160.1743	160.2992	160.4278	160.152	159.9868	160.3225	160.3512	160.3903	160.4593	160.4867	160.5837	160.6775	160.1255	160.0552
Latitude Start (°N)	55.5668	55.523	55.4633	55.2787	55.2067	55.095	55.0665	55.0518	55.0187	54.8305	54.7913	54.7913	55.1187	55.1495
Heading, Degrees	249	55	38	316	155	226	50	233	224	177	252	278	320	323
Average Depth (m)	182.8	195.6	182.8	137.1	74.97	149.9	140.8	151.7	137.1	93.26	109.7	111.5	29.25	74.97
Distance Fished (km)	1.85	1.85	1.85	1.48	1.29	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Bottom Temp. (°C)	4.81	4.78	4.51	4.76	4.93	5.06	5.05	5.03	5.13	4.93	4.91	4.85	7.81	5.38
Haul	226	227	228	229	230	231	232	233	234	235	236	237	238	239
Location	W.NAGAI	BEAVER												
Month/Day/Year	8/5/2013	8/5/2013	8/5/2013	8/5/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/6/2013	8/7/2013
Station	332B	278	BVC	BVA	BVB	311B	329C	311C	311A	BAF	BAD	BAC	BAA	BAE
Longitude Start (°W)	160.3762	160.9295	160.8978	160.9058	160.8737	160.5833	160.4947	160.5045	160.5942	160.5518	160.571	160.6153	160.6985	160.5977
Latitude Start (°N)	55.208	55.4022	55.4627	55.4937	55.5027	55.4565	55.4308	55.4335	55.4507	55.4767	55.5087	55.5202	55.5388	55.4845
Heading, Degrees	9	22	220	190	180	78	72	273	80	338	334	193	118	164
Average Depth (m)	179.2	135.3	87.77	45.71	36.57	133.4	131.6	135.3	124.3	82.29	95.09	100.5	31.08	122.5
Distance Fished (km)	1.48	1.85	1.48	1.48	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.11	1.85
Bottom Temp. (°C)	5.11	5.35	5.54	7.01	6.89	4.36	4.35	4.38	4.47	6.1	4.89	5.05	7.65	4.33

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Appendix B1.–Page 5 of 7.

Haul	240	241	242	243	244	245	246	247	248	249	250	251	252	253
Location	PAVLOF													
Month/Day/Year	8/8/2013	8/8/2013	8/8/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/9/2013	8/10/2013
Station	245	228	VOD	PAH	PAIX	PAEX	PALX	PAP	PAU	PARA	PAOA	PARB	PAV	VOI
Longitude Start (°W)	161.2228	161.283	161.5493	161.6033	161.5842	161.5253	161.5443	161.566	161.6737	161.6718	161.6545	161.5923	161.575	161.6087
Latitude Start (°N)	55.2707	55.2798	55.3152	55.5138	55.533	55.5485	55.4973	55.4573	55.3537	55.3922	55.4352	55.4152	55.3567	55.2823
Heading, Degrees	294	121	71	184	191	105	196	245	354	358	24	159	193	57
Average Depth (m)	85.94	84.12	118.8	56.69	45.71	32.91	54.86	76.8	126.1	104.2	91.43	84.12	98.75	106
Distance Fished (km)	1.66	1.85	1.85	1.11	1.11	1.11	1.48	1.66	1.85	1.85	1.66	1.85	1.85	1.85
Bottom Temp. (°C)	5.77	5.84	5.67	6.29	7.24	8.33	6.1	5.75	5.36	5.41	5.55	5.89	5.97	5.48
Haul	254	255	256	257	258	259	260	261	262	263	264	265	266	267
Location	PAVLOF	COLD B.	COLD B.	COLD B.	COLD B.									
Month/Day/Year	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/10/2013	8/11/2013	8/11/2013	8/11/2013	8/11/2013
Station	VOH	VOBX	VOA	VOFB	VOG	VOMB	VON	VOR	VOQ	VOLX	VOP	156A	157A	BEG
Longitude Start (°W)	161.6572	161.6663	161.7135	161.8218	161.7718	161.7733	161.7653	161.745	161.8237	161.973	161.9392	162.1067	162.1235	162.1703
Latitude Start (°N)	55.2823	55.3033	55.3112	55.2588	55.2552	55.2507	55.2255	55.1967	55.199	55.2138	55.1833	54.9648	54.919	54.9768
Heading, Degrees	264	84	194	43	104	222	53	314	100	122	40	343	163	3
Average Depth (m)	100.5	98.75	111.5	96.92	106	102.4	120.6	122.5	93.26	71.31	82.29	87.77	74.97	82.29
Distance Fished (km)	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.48
Bottom Temp. (°C)	5.44	5.46	5.46	5.35	5.45	5.3	5.27	5.25	5.34	5.63	5.54	6.25	6.46	6.59
Haul	268	269	270	271	272	273	274	275	276	277	278	279	280	281
Location	COLD B.	MORZ.												
Month/Day/Year	8/11/2013	8/11/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/12/2013	8/14/2013	8/14/2013	8/14/2013	8/14/2013
Station	BEF	BEE	BEBX	BECX	COO	MOOX	MOK	MOSX	MORX	87AX	87D	MOL	MOI	MOG
Longitude Start (°W)	162.1122	162.1488	162.1497	162.1598	162.3872	162.9872	162.9972	163.08	163.1338	163.0047	162.9448	162.957	162.9698	162.9975
Latitude Start (°N)	55.0205	55.0725	55.1403	55.1118	55.0012	54.8527	54.8892	54.8665	54.8402	54.816	54.7768	54.9123	54.9562	54.9923
Heading, Degrees	189	187	200	189	96	354	11	220	240	52	137	358	169	137
Average Depth (m)	95.09	84.12	67.66	80.46	102.4	98.75	102.4	96.92	95.09	85.94	95.09	124.3	102.4	91.43
Distance Fished (km)	1.85	1.85	1.66	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.66	1.85
Bottom Temp. (°C)	6.3	6.27	6.59	6.24	6.61	5.53	5.5	5.52	5.53	5.77	5.85	5.73	5.63	5.54
Haul	282	283	284	285	286	287	288	289	290	291	292	293	294	295
Location	MORZ.	MORZ.	MORZ.	MORZ.	AKUTAN	AKUTAN	AKUTAN	AKUTAN	AKUTAN	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	PUM. B.
Month/Day/Year	8/14/2013	8/14/2013	8/14/2013	8/14/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/16/2013	8/17/2013	8/17/2013	8/17/2013	8/17/2013	8/17/2013
Station	MOH	MOF	MOD	MOB	AKA	AKC	AKD	AKG	AKL	MKF	MKE	MKC	MKB	PUB
Longitude Start (°W)	162.9957	163.0232	163.0418	163.0677	165.7015	165.7117	165.7083	165.7485	165.7532	167.0033	166.9183	166.85	166.7843	167.1695
Latitude Start (°N)	54.9568	54.9832	55.0175	55.0653	54.1525	54.1765	54.2088	54.2257	54.255	53.7412	53.7308	53.7157	53.7003	53.5527
Heading, Degrees	173	339	359	170	22	1	189	348	27	251	276	282	300	143
Average Depth (m)	98.75	80.46	89.6	67.66	73.14	85.94	87.77	98.75	102.4	190.1	197.5	173.7	102.4	67.66
Distance Fished (km)	1.85	1.48	1.48	1.11	1.11	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.85
Bottom Temp. (°C)	5.63	5.57	5.57	5.96	6.9	5.91	5.92	6.09	6.84	4.6	4.59	4.44	4.95	6.87

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Appendix B1.–Page 6 of 7.

Haul	296	297	298	299	300	301	302	303	304	305	306	307	308	312
Location	PUM.	B.	MAKUSH.	MAKUSH.	MAKUSH.	MAKUSH.	UNAK.	SANAK						
Month/Day/Year	8/17/2013	8/18/2013	8/18/2013	8/18/2013	8/18/2013	8/18/2013	8/19/2013	8/19/2013	8/19/2013	8/19/2013	8/19/2013	8/20/2013	8/20/2013	8/23/2013
Station	PUA	MKP	MKN	MKJ	MKK	UNI	UND	UNJ	KAA	UNG	UNF	UNE	UNC	126
Longitude Start (°W)	167.0418	167.0612	167.1135	167.1097	167.1533	166.6097	166.4788	166.4947	166.3297	166.4455	166.5267	166.503	166.6023	162.5553
Latitude Start (°N)	53.5295	53.6467	53.677	53.7188	53.7197	54.0257	53.9455	54.0133	53.972	53.9887	53.9672	53.944	53.9163	54.4835
Heading, Degrees	88	309	318	89	300	136	8	332	1	241	36	351	348	121
Average Depth (m)	76.8	131.6	128	126.1	118.8	100.5	80.46	164.5	80.46	91.43	153.6	118.8	133.4	140.8
Distance Fished (km)	1.11	1.85	1.48	1.29	1.85	1.85	1.29	1.85	1.48	1.66	1.85	1.66	1.85	1.48
Bottom Temp. (°C)	4.45	6.22	6.04	4.57	5.15	6.46	6.34	5.33	8.35	6.63	5.77	5.91	5.86	5.01
Haul	313	314	315	316	317	318	319	320	321	322	323	324	325	326
Location	SANAK	SANAK	SANAK	SANAK	SANAK	SANAK	COLD B.							
Month/Day/Year	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/23/2013	8/24/2013	8/24/2013	8/24/2013	8/24/2013	8/24/2013	8/24/2013	8/24/2013	8/24/2013
Station	125	137	138A	138C	138B	113	COB	COC	COE	COF	COGB	COH	COGA	COM
Longitude Start (°W)	162.54	162.4497	162.3977	162.3465	162.41	162.6772	162.596	162.5548	162.5448	162.5285	162.4277	162.3977	162.4752	162.4642
Latitude Start (°N)	54.5172	54.5133	54.4903	54.4487	54.4467	54.5663	55.2267	55.227	55.1973	55.1625	55.1155	55.11	55.1435	55.016
Heading, Degrees	114	94	147	131	302	163	136	168	170	119	330	291	329	112
Average Depth (m)	146.2	144.4	140.8	144.4	149.9	133.4	53.03	45.71	65.83	82.29	53.03	45.71	85.94	80.46
Distance Fished (km)	1.48	1.48	1.48	1.48	1.48	1.48	0.92	0.92	0.92	1.48	1.29	1.11	1.29	1.85
Bottom Temp. (°C)	4.94	4.98	4.98	4.99	4.95	4.92	9.37	9.4	9.2	9.36	9.37	9.41	9.33	7.6
Haul	327	328	329	330	331	332	333	334	335	336	337	338	339	340
Location	MITRO.	MITRO.	W.KOD											
Month/Day/Year	8/26/2013	8/26/2013	9/4/2013	9/4/2013	9/4/2013	9/5/2013	9/5/2013	9/5/2013	9/5/2013	9/5/2013	9/5/2013	9/5/2013	9/5/2013	9/6/2013
Station	4038	4043	KUD	KUF	KUG	KUM	KUK	KUI	KUJ	KULX	KUL	KUY	KUYX	KUX
Longitude Start (°W)	158.9882	158.9243	153.1637	153.3	153.4328	153.1188	153.2547	153.3903	153.2922	153.2242	153.207	153.1957	153.2135	153.3797
Latitude Start (°N)	55.6987	55.7025	57.9852	58.0287	58.0435	57.8633	57.9185	57.974	57.9365	57.862	57.8333	57.787	57.7422	57.7368
Heading, Degrees	52	159	273	272	180	282	302	285	311	324	4	186	20	353
Average Depth (m)	144.4	148.1	40.23	144.4	74.97	60.34	138.9	250.5	159	106	82.29	67.66	21.94	102.4
Distance Fished (km)	1.85	1.48	1.11	1.85	1.85	1.85	1.85	1.85	1.85	1.66	1.48	1.48	1.11	1.48
Bottom Temp. (°C)	4.94	4.92	6.75	5.22	5.97	5.94	5.04	4.92	5.01	5.76	5.95	7.98	9.54	5.07
Haul	341	342	343	344	345	346	347	348	349	350	351	352	353	354
Location	W.KOD													
Month/Day/Year	9/6/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013	9/6/2013	9/7/2013	9/7/2013	9/7/2013	9/7/2013	9/7/2013	9/7/2013
Station	KUXX	KUU	KUV	KUW	KUT	KUS	KUQ	KUP	KUNX	UYBX	UYFX	UYHX	UYEX	UYKX
Longitude Start (°W)	153.4057	153.483	153.5288	153.5193	153.519	153.55	153.5223	153.4918	153.3808	153.9978	153.8555	153.7142	153.9285	153.8868
Latitude Start (°N)	57.7678	57.7835	57.7387	57.6818	57.8095	57.8758	57.8848	57.871	57.838	57.7417	57.6742	57.6622	57.6467	57.6005
Heading, Degrees	322	323	355	349	351	152	304	138	308	175	287	267	350	314
Average Depth (m)	115.2	155.4	87.77	65.83	184.6	184.6	181	168.2	137.1	137.1	142.6	95.09	192	142.6
Distance Fished (km)	1.66	1.85	1.48	1.48	1.85	1.85	1.85	1.85	1.85	1.85	1.48	1.48	1.85	1.85
Bottom Temp. (°C)	4.95	4.97	5.73	6.38	4.93	5.02	4.91	4.91	5.08	5.9	6.5	7.01	5.87	6.28

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Appendix B1.–Page 7 of 7.

Haul	355	356	357	358	359	360	361	362	363	364	365	366	367	368
Location	W.KOD	N.MAIN.												
Month/Day/Year	9/8/2013	9/8/2013	9/8/2013	9/8/2013	9/9/2013	9/9/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013	9/10/2013
Station	UYSS	UYQX	UYMX	UYO	RAA	MAA	PAA	121	120	91	61	31	60	90
Longitude Start (°W)	153.8123	153.9062	153.8997	153.7978	153.2057	153.071	152.8625	153.1347	153.2515	153.3048	153.2125	153.2227	153.28	153.4088
Latitude Start (°N)	57.3943	57.4878	57.5685	57.5697	58.1278	58.2163	58.2958	58.4523	58.4885	58.5403	58.6255	58.7077	58.6662	58.5868
Heading, Degrees	359	345	353	325	323	277	284	341	324	17	40	32	223	230
Average Depth (m)	69.49	151.7	109.7	76.8	106	126.1	93.26	173.7	168.2	171.8	162.7	155.4	122.5	126.1
Distance Fished (km)	1.11	1.48	1.85	1.48	1.85	1.85	1.85	1.48	1.48	1.48	1.48	1.48	1.66	1.66
Bottom Temp. (°C)	7.02	6.56	6.35	7.22	6.11	6.18	6.51	4.9	5.04	5.72	5.32	5.52	6.08	6.25
Haul	369	370	371	372	373	374	375	376	377	378	379	380	381	382
Location	N.MAIN.													
Month/Day/Year	9/10/2013	9/10/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/11/2013	9/12/2013	9/12/2013
Station	119	118	144	145	117	146	147	174	200	224	223	222	172	171Y
Longitude Start (°W)	153.5297	153.6128	153.9695	153.8382	153.7833	153.7092	153.5545	153.6137	153.7068	153.8358	153.9212	154.0477	154.0407	154.047
Latitude Start (°N)	58.5275	58.4925	58.4373	58.428	58.4518	58.448	58.3945	58.3507	58.2775	58.198	58.1718	58.1532	58.284	58.3248
Heading, Degrees	221	229	77	60	53	179	113	239	196	229	250	235	52	189
Average Depth (m)	133.4	135.3	89.6	104.2	120.6	153.6	171.8	168.2	184.6	201.1	210.3	263.3	126.1	78.63
Distance Fished (km)	1.66	1.85	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Bottom Temp. (°C)	6.38	5.88	7.75	7.28	6.44	5.84	5.4	4.92	4.87	5.04	5	5.05	6.49	8.42
Haul	383	384	385	386	387									
Location	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.	N.MAIN.									
Month/Day/Year	9/12/2013	9/12/2013	9/12/2013	9/12/2013	9/12/2013									
Station	198	199	173	171X	171									
Longitude Start (°W)	154.0425	153.8812	153.809	154.1753	154.2552									
Latitude Start (°N)	58.2657	58.249	58.2962	58.3287	58.3038									
Heading, Degrees	54	66	46	274	76									
Average Depth (m)	162.7	208.4	199.3	107.8	111.5									
Distance Fished (km)	1.48	1.48	1.48	1.48	1.48									
Bottom Temp. (°C)	5.5	5.03	5.04	7.96	7.86									

Appendix B2.—2013 bottom trawl survey locations, stations, and station areas by district and section.

KODIAK DISTRICT											
NORTHEAST SECTION			EASTSIDE SECTION			SOUTHEAST SECTION			SOUTHWEST SECTION		
<b>Kizhuyak Bay</b>			<b>Ugak Bay</b>			<b>South Sitkalidak Strait</b>			<b>Alitak Flats</b>		
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>
KZA	11.7	3.4	UGAA	16.0	4.7	THA	15.1	4.4	645B	34.3	10.0
KZB	2.7	0.8	UGAB	4.7	1.4	THC	19.6	5.7	646A	27.1	7.9
KZC	12.3	3.6	UGAC	3.2	0.9	THD	28.6	8.3	646B	16.5	4.8
KZD	23.7	6.9	UGB	5.8	1.7	THF	22.3	6.5	646C	29.2	8.5
KZE	27.4	8.0	UGC	17.5	5.1	THG	21.4	6.3	646D	37.4	10.9
KZF	20.6	6.0	UGD	11.0	3.2	THH	19.2	5.6	682B	23.0	6.7
KZG	21.3	6.2	UGE	12.7	3.7	THI	21.6	6.3	683A	23.0	6.7
KZJ	21.4	6.3	UGF	15.8	4.6	THJ	17.8	5.2	683B	20.9	6.1
KZK	21.4	6.3	UGG	11.0	3.2	THK	16.5	4.8	683D	9.3	2.7
KZO	21.4	6.3	UGI	21.4	6.3	THL	9.3	2.7	684A	23.0	6.7
KZR	13.7	4.0	UGJ	21.4	6.3	THM	10.6	3.1	684B	10.3	3.0
KZS	3.1	0.9	UGM	16.8	4.9	THN	5.1	1.5	684C	8.6	2.5
	200.8	58.6		157.3	45.9		207.1	60.4		262.4	76.5
<b>Marmot Bay</b>			<b>Kiliuda Bay</b>								
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	<b>Offshore Twoheaded</b>			<b>Alitak Bay</b>		
MOEX	36.2	10.6	KLA	20.9	6.1	618A	42.9	12.5	ALA	3.1	0.9
MOGX	65.9	19.2	KLB	9.3	2.7	585X	94.3	27.5	ALB	17.8	5.2
MOLX	27.4	8.0	KLC	19.6	5.7	614	64.1	18.7	ALC	8.1	2.4
MONX	75.5	22.0	KLD	18.2	5.3	615	99.5	29.0	ALD	13.0	3.8
MOPX	27.8	8.1	KLE	8.2	2.4	651	85.8	25.0	ALF	21.4	6.3
MOQ	21.4	6.3	KLF	15.1	4.4		386.6	112.7	ALG	19.9	5.8
MOX	13.0	3.8	KLG	16.5	4.8				ALH	16.1	4.7
MOXX	29.5	8.6	KLH	16.8	4.9	<b>Horse's Head</b>			ALI	16.6	4.9
255	68.6	20.0	KLI	21.4	6.25	586	85.8	25.0	ALJ	15.1	4.4
256	85.8	25.0	KLL	21.4	6.25	688	85.8	25.0	ALK	9.9	2.9
257	85.8	25.0		167.4	48.8	725	85.8	25.0	ALL	8.2	2.4
283	65.2	19.0				726	85.8	25.0	ALM	16.1	4.7
284	85.8	25.0				727	85.8	25.0	ALO	16.8	4.9
285	85.8	25.0				728	85.8	25.0	ALP	19.2	5.6
313	85.8	25.0				729	85.8	25.0	ALQ	14.4	4.2
314	85.8	25.0				759	85.8	25.0	ALR	13.4	3.9
255X	60.0	17.5				760	85.8	25.0		229.3	66.9
283X	63.5	18.5				761	85.8	25.0			
	1,068.5	311.5					857.5	250.0			
<b>Chiniak Gully</b>			533A	42.9	12.5						
Station	KM <sup>2</sup>	NM <sup>2</sup>	533B	42.9	12.5						
369X	150.9	44.0	534B	21.6	6.3						
395	85.8	25.0	534D	28.3	8.3						
420	85.8	25.0	535A	21.4	6.3						
421	85.8	25.0	535B	21.4	6.3						
443	85.8	25.0	535C	21.4	6.3						
444	85.8	25.0	535D	21.4	6.3						
	579.7	169.0	559	85.8	25.0						
<b>Chiniak Bay</b>			560	85.8	25.0						
Station	KM <sup>2</sup>	NM <sup>2</sup>	561	85.8	25.0						
CHA	5.5	1.6	587	85.8	25.0						
CHB	7.9	2.3	588	85.8	25.0						
CHE	20.6	6.0	589	85.8	25.0						
CHF	12.7	3.7	619	85.8	25.0						
CHG	34.6	10.1	620	85.8	25.0						
CHJ	11.3	3.3	621	85.8	25.0						
CHK	8.6	2.5	654	85.8	25.0						
CHL	14.1	4.1	655	85.8	25.0						
	115.2	33.6	656	85.8	25.0						
			695	85.8	25.0						
			696	85.8	25.0						
			1,668.6	486.5							

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Appendix B2.—Page 2 of 3.

KODIAK DISTRICT (Continued)								
N.MAINLAND SECTION			WESTSIDE SECTION					
<u>Uyak Bay</u>			<u>Kupreanof-Viekoda</u>			<u>Uganik Bay</u>		
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>
31	83.7	24.4	UYBX	21.5	6.3	KUD	27.1	7.9
60	85.8	25.0	UYEX	29.9	8.7	KUF	11.3	3.3
61	85.8	25.0	UYFX	22.1	6.4	KUG	15.4	4.5
90	80.3	23.4	UYHX	4.1	1.2	KUI	6.4	1.9
91	85.8	25.0	UYKX	13.9	4.0	KUJ	17.0	5.0
117	97.8	28.5	UYMX	20.8	6.1	KUK	14.1	4.1
118	85.8	25.0	UYO	3.4	1.0	KUL	2.7	0.8
119	85.8	25.0	UYQX	7.7	2.2	KUM	10.5	3.1
120	85.8	25.0	<u>UYSS</u>	6.0	1.8	KUY	4.1	1.2
121	85.8	25.0		129.3	37.7	KULX	2.1	0.6
144	60.7	17.7				<u>KUYX</u>	2.6	0.8
145	85.8	25.0						
146	85.8	25.0					113.2	33.0
147	85.8	25.0	<u>West Afognak</u>					
171	11.4	3.3	Station	KM <sup>2</sup>	NM <sup>2</sup>			
171X	8.1	2.4	RAA	6.7	2.0			
171Y	29.1	8.5	PAA	15.1	4.4			
172	89.2	26.0	MAA	10.6	3.1			
173	85.8	25.0		32.4	9.5			
174	85.8	25.0						
198	85.8	25.0	KODIAK DISTRICT TOTALS					
199	85.8	25.0						
200	85.8	25.0	<u>SECTION</u>	KM <sup>2</sup>	NM <sup>2</sup>			
222	113.2	33.0	Northeast	1,964.2	572.7			
223	85.8	25.0	Eastside	1,993.3	581.2			
224	85.8	25.0	Southeast	1,451.2	423.1			
	2,031.1	592.2	Southwest	491.7	143.4			
			Westside	373.6	108.9			
			<u>N. Mainland</u>	2,031.1	592.2			
			Kodiak District	8,305.2	2,421.3			
CHIGNIK DISTRICT								
CHIGNIK BAY			IVANOF BAY			KUJULIK BAY		
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>
4256	24.0	7.0	400X	5.6	1.6	4290	21.4	6.3
4262	21.4	6.3	4000	15.8	4.6	4296	10.3	3.0
4264	20.1	5.9	4007	59.3	17.3	4298	19.2	5.6
4265	6.6	1.9	4008	42.1	12.3	4301	21.4	6.3
4266	19.6	5.7	4024	65.7	19.2	4302	21.0	6.1
4267	21.4	6.3	4900	10.7	3.1	<u>4308</u>	17.2	5.0
4270	17.1	5.0	<u>4915</u>	51.7	15.1		110.5	32.2
4271	10.3	3.0		250.8	73.1			
4272	15.9	4.6						
4274	21.4	6.3	CHIGNIK DISTRICT TOTALS					
4277	21.4	6.3						
4278	21.4	6.3	<u>SECTION</u>	KM <sup>2</sup>	NM <sup>2</sup>			
4282	21.4	6.3	Chignik Bay	325.0	94.7			
4286	21.4	6.3	Ivanof	250.8	73.1			
4287	29.7	8.7	Kujulik	110.5	32.2			
4312	21.9	6.4	Mitrofania	722.1	210.5			
4964	9.6	2.8		325.0	94.7			
				1,408.4	410.6			
MITROFANIA ISLAND								
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>
4025	37.6	11.0	4026	40.1	11.7	4035	68.6	20.0
4036	67.9	19.8	4037	45.2	13.2	4038	41.0	12.0
4043	32.6	9.5	4048	14.7	4.3	4049	57.2	16.7
4063	57.2	16.7	4064	57.2	16.7	4065	80.0	23.3
4066	28.9	8.4	4067	28.9	8.4	4068	28.9	8.4
4095	36.1	10.5	<u>4095</u>	722.1	210.5			

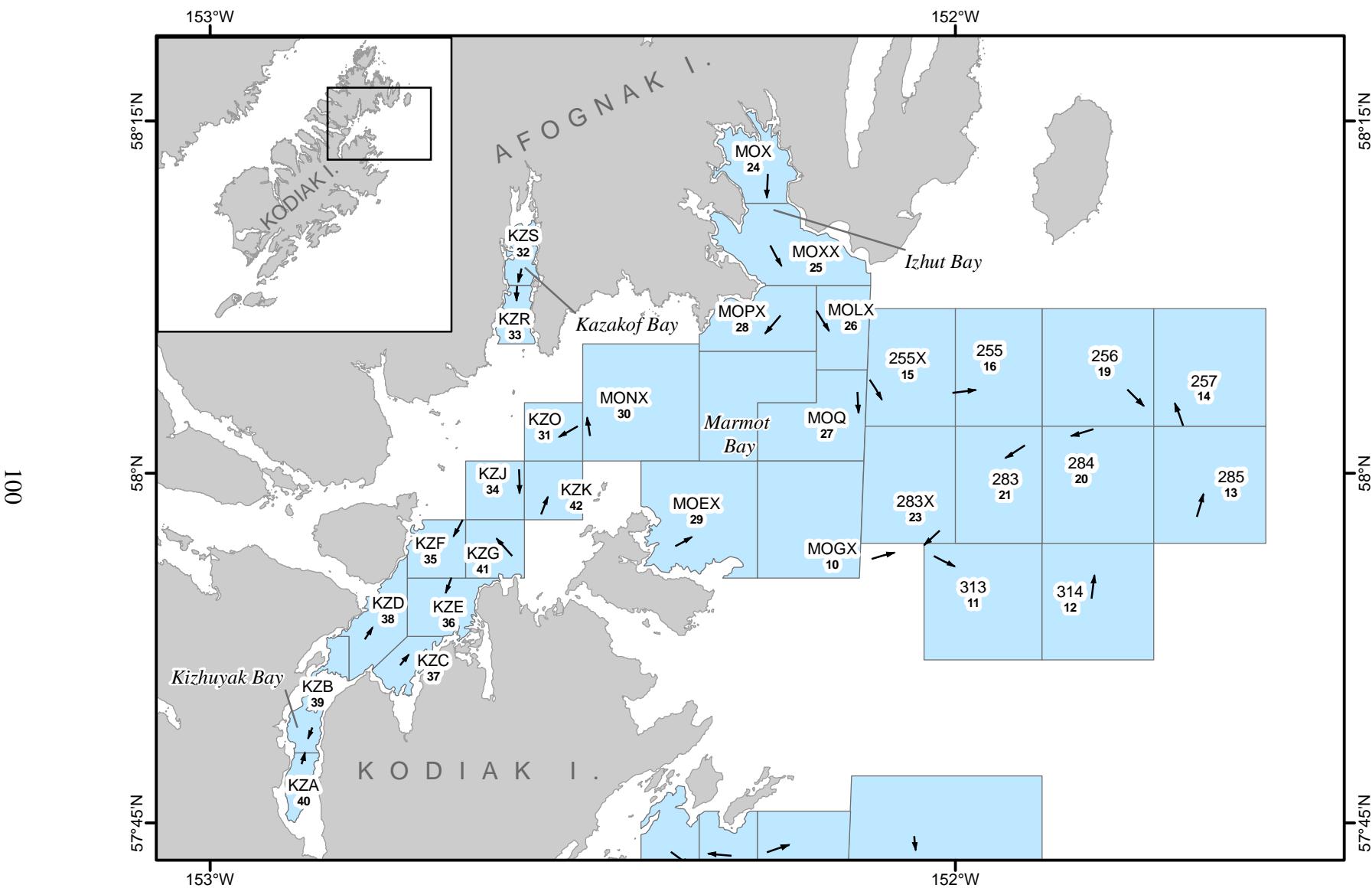
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Appendix B2.—Page 3 of 3.

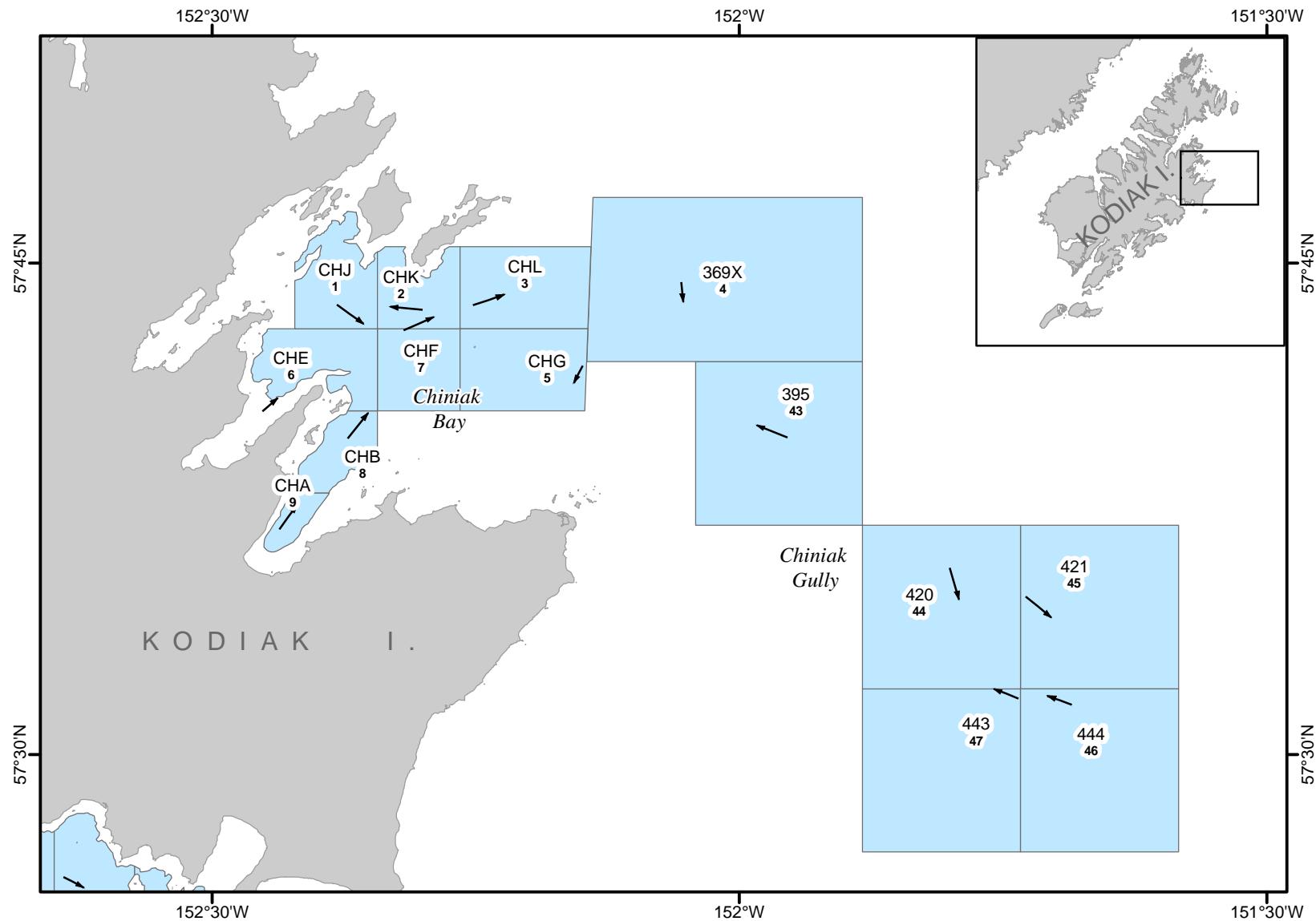
SOUTH PENINSULA DISTRICT											
SANAK ISLAND			PAVLOF/VOLCANO BAY			COLD/BELKOFSKI BAY			STEPOVAK BAY		
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>
113	77.2	22.5	228	93.5	27.3	157A	21.0	6.1	368A	45.6	13.3
125	77.2	22.5	245	87.7	25.6	156A	44.2	12.9	STA	21.0	6.1
126	83.9	24.45	PAEX	41.6	12.1	BEBX	15.9	4.6	STB	18.9	5.5
137	85.8	25.0	PAIX	38.3	11.2	BECX	25.7	7.5	STD	22.7	6.6
138A	46.3	13.5	PAH	15.1	4.4	BEE	21.4	6.3	STE	15.5	4.5
138B	18.4	5.37	PALX	42.9	12.5	BEF	15.7	4.6		123.7	36.1
138C	56.9	16.6	PAOA	6.7	2.0	BEG	20.3	5.9			
	445.6	129.9	PAP	20.8	6.1	COB	21.1	6.2			
			PARA	19.1	5.6	COC	15.3	4.5			
			PARB	21.1	6.1	COE	21.1	6.2	278	71.4	20.8
			PAU	21.4	6.3	COF	11.5	3.4	311A	15.5	4.5
			PAV	20.6	6.0	COGA	9.8	2.9	311B	20.4	6.0
			VOA	22.4	6.5	COGB	3.6	1.1	311C	17.3	5.0
			VOBX	43.8	12.8	COH	7.8	2.3	329B	21.4	6.3
			VOD	20.8	6.1	COM	18.5	5.4	329C	21.4	6.3
			VOFB	15.5	4.5	COO	22.4	6.5	348	85.8	25.0
			VOG	23.0	6.7		295.5	86.1	BAA	12.0	3.5
			VOH	21.7	6.3				BAC	16.9	4.9
			VOI	22.1	6.4				BAD	10.4	3.0
			MOI	21.4	6.25	VOLX	27.3	8.0	WEST NAGAI STRAIT		
			MOK	21.4	6.25	VOMB	16.8	4.9	BAE	12.7	3.7
			MOL	21.4	6.25	VON	22.4	6.5	BAF	10.8	3.2
			MOOX	56.1	16.35	VOP	21.4	6.3	BVA	15.3	4.5
			MORX	58.7	17.1	VOQ	15.9	4.6	BVB	14.0	4.1
			MOSX	37.7	11.0	VOR	21.1	6.2	BVC	18.9	5.5
				377.6	110.1		723.1	210.8		364.2	106.2
									S. PENINSULA DISTRICT		
									TOTALS		
									SECTION	KM <sup>2</sup>	NM <sup>2</sup>
									Sanak	445.6	129.9
									Morzhovoi	377.6	110.
									Cold Bay	295.5	86.1
									Pavlof	723.1	210.8
									West Nagai	833.8	243.1
									Beaver	364.2	106.2
									Stepovak	123.8	36.1
										3,163.6	922.3
EASTERN ALEUTIAN DISTRICT											
AKUTAN BAY			UNALASKA/KALEKTA BAY			MAKUSHIN BAY			PUMICESTONE BAY		
Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>	Station	KM <sup>2</sup>	NM <sup>2</sup>
AKA	33.3	9.7	KAA	19.6	5.7	MKB	15.8	4.6	PUA	4.8	1.4
AKC	21.3	6.2	UNC	22.6	6.6	MKC	18.5	5.4	PUB	15.1	4.4
AKD	23.3	6.8	UND	11.7	3.4	MKE	29.2	8.5		19.9	5.8
AKG	21.6	6.3	UNE	17.8	5.2	MKK	37.4	10.9	E. ALEUTIAN DISTRICT		
AKL	21.6	6.3	UNF	21.6	6.3	MKF	20.9	6.1	TOTALS		
	121.1	35.3	UNG	21.6	6.3	MKJ	23.7	6.9			
			UNI	19.9	5.8	MKN	26.1	7.6	SECTION	KM <sup>2</sup>	NM <sup>2</sup>
			UNJ	21.6	6.3	MKP	12.3	3.6	Akutan	121.1	35.3
				156.4	45.6		183.8	53.6	Unalaska	156.4	45.6
									Makushin	183.8	53.6
									Pumicestone	19.9	5.8
										481.2	140.3



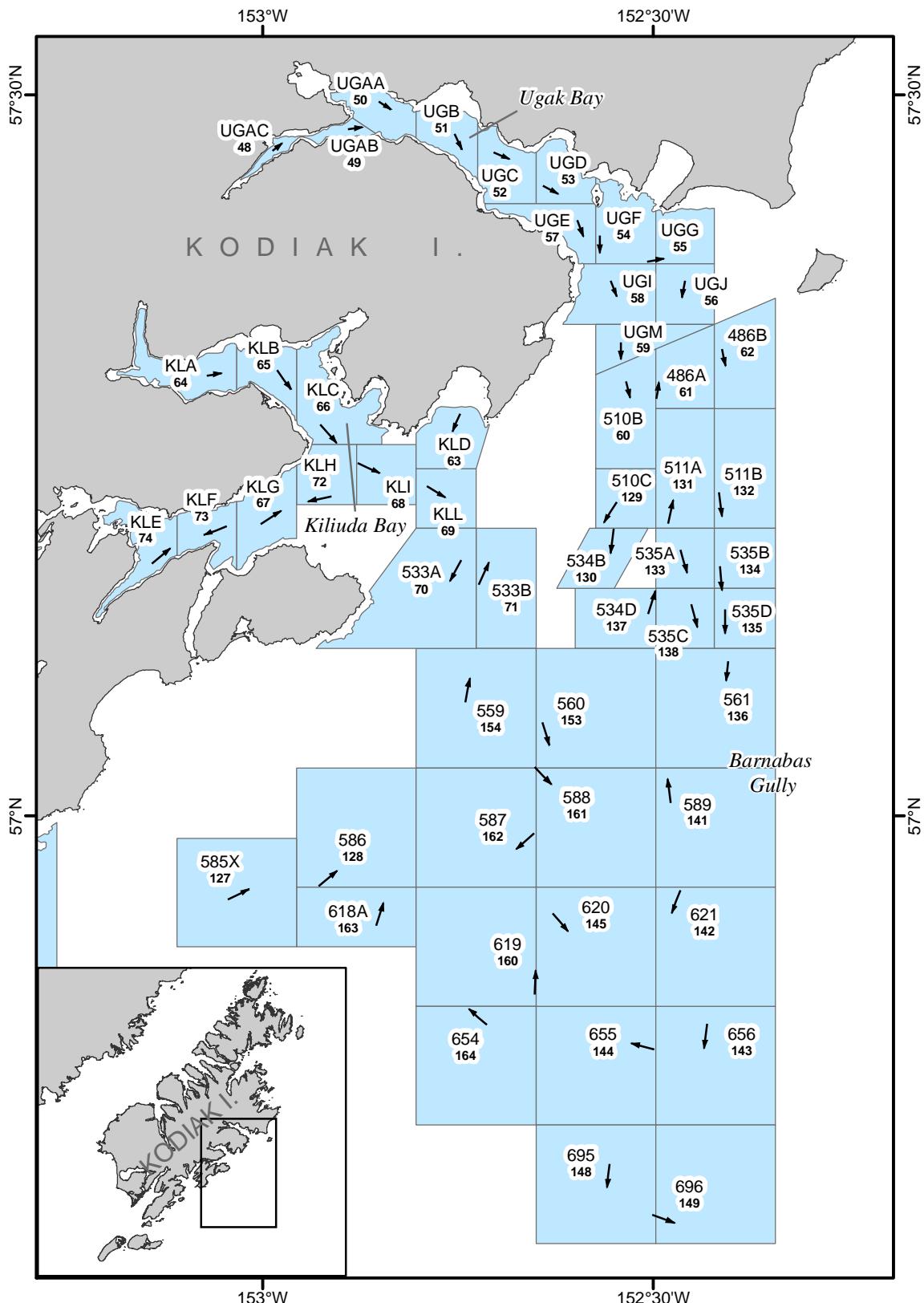
## **APPENDIX C. TRAWL MAPS**



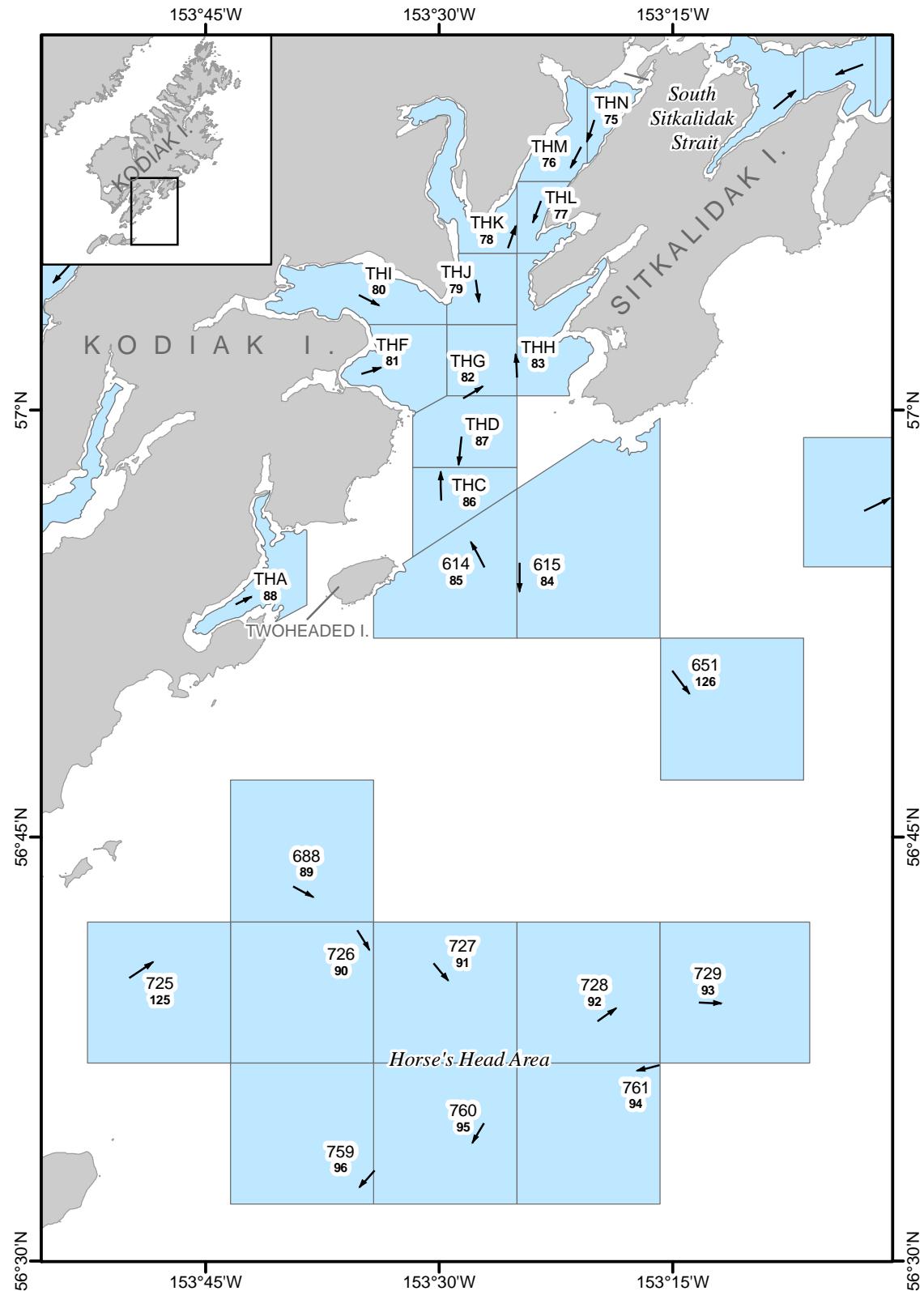
Appendix C1.—Izhut, Kazakof, Kizhuyak, and Marmot bays station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), June 2013.



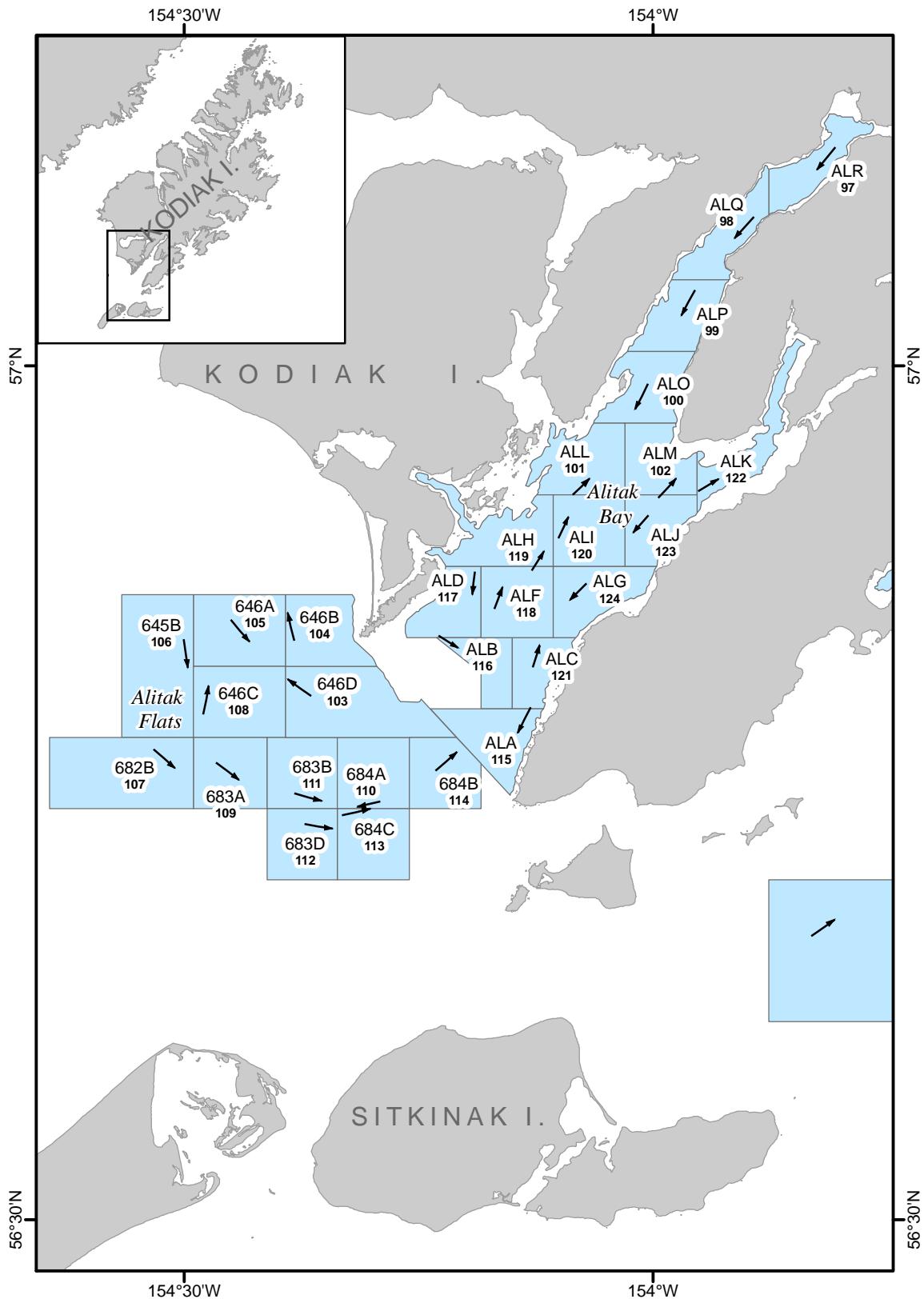
Appendix C2.—Chiniak Bay and Chiniak Gully station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), June 2013.



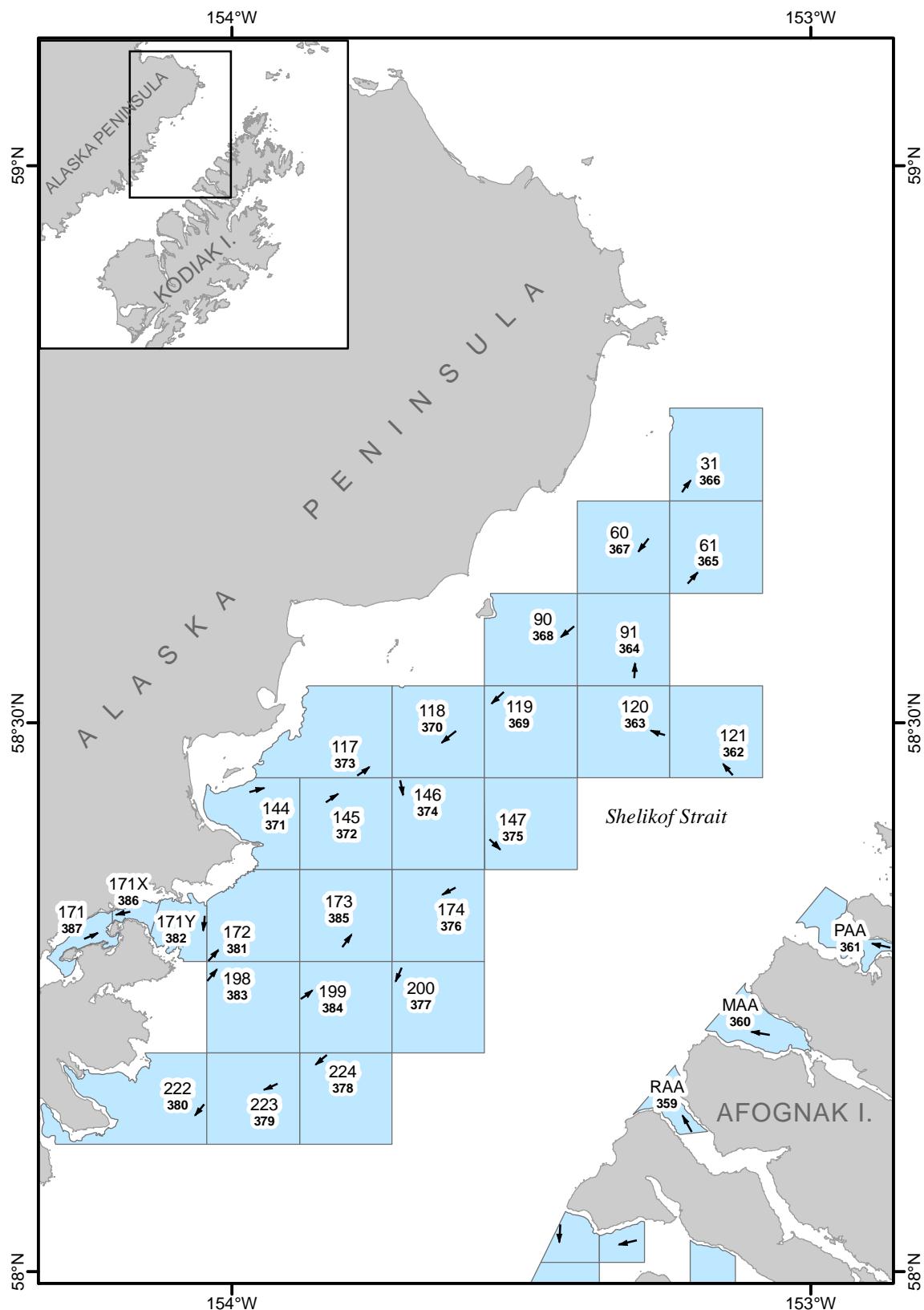
Appendix C3.—Ugak Bay, Kiliuda Bay, and Barnabas Gully station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), June and July 2013.



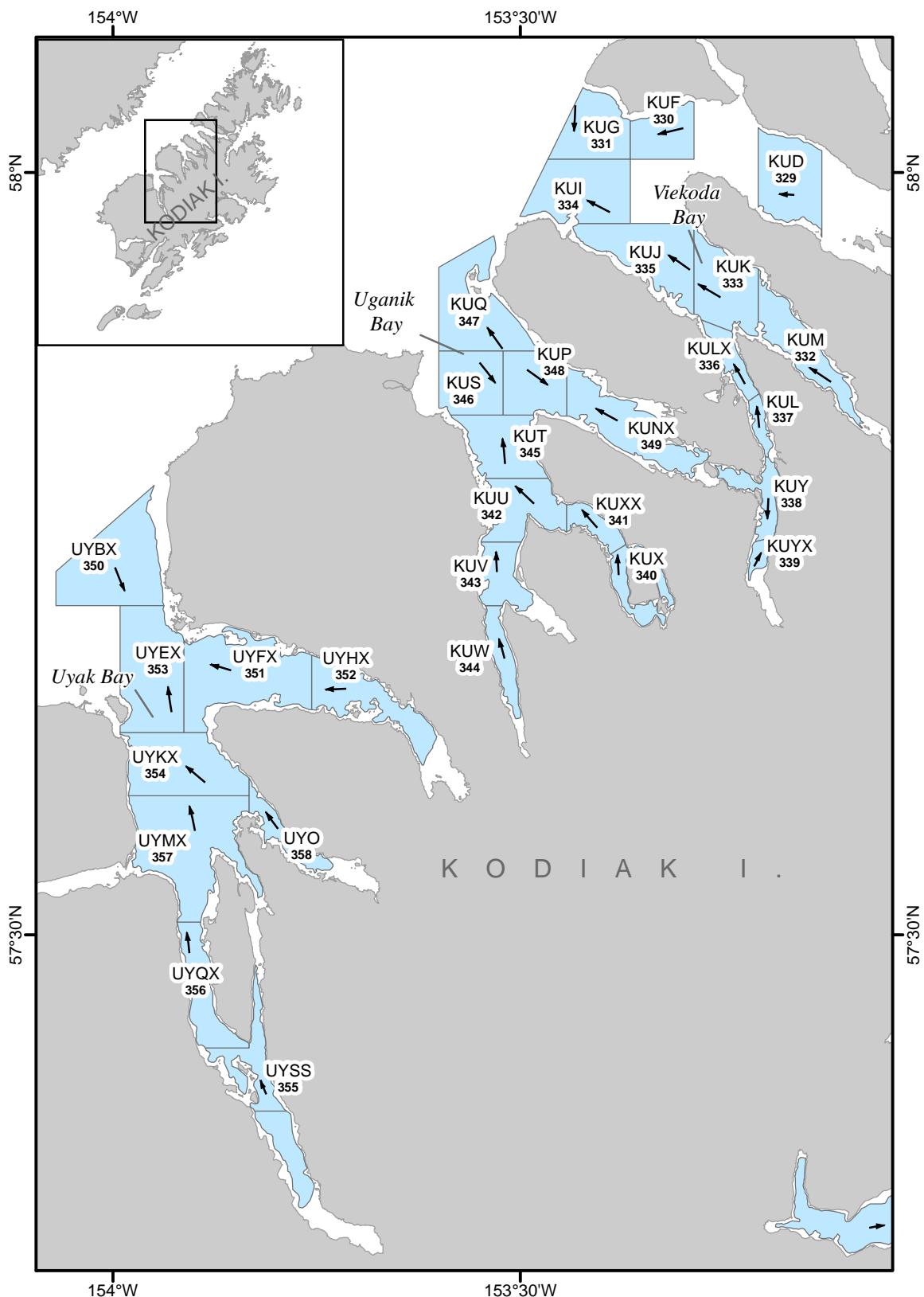
Appendix C4.—South Sitkalidak Strait, Twoheaded Island, and Horse's Head area station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), July 2013.



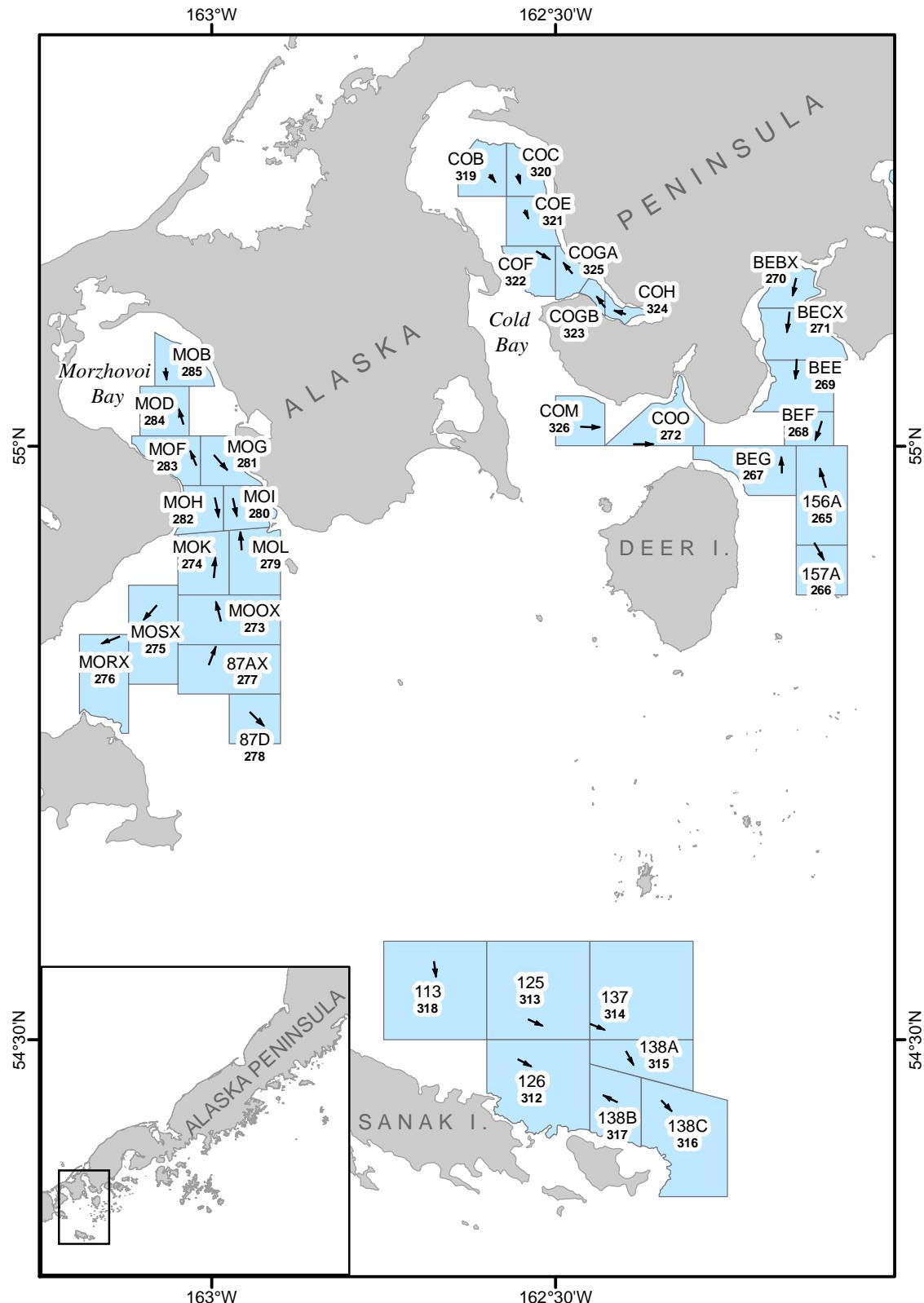
Appendix C5.—Alitak Bay and Alitak Flats station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), July 2013.



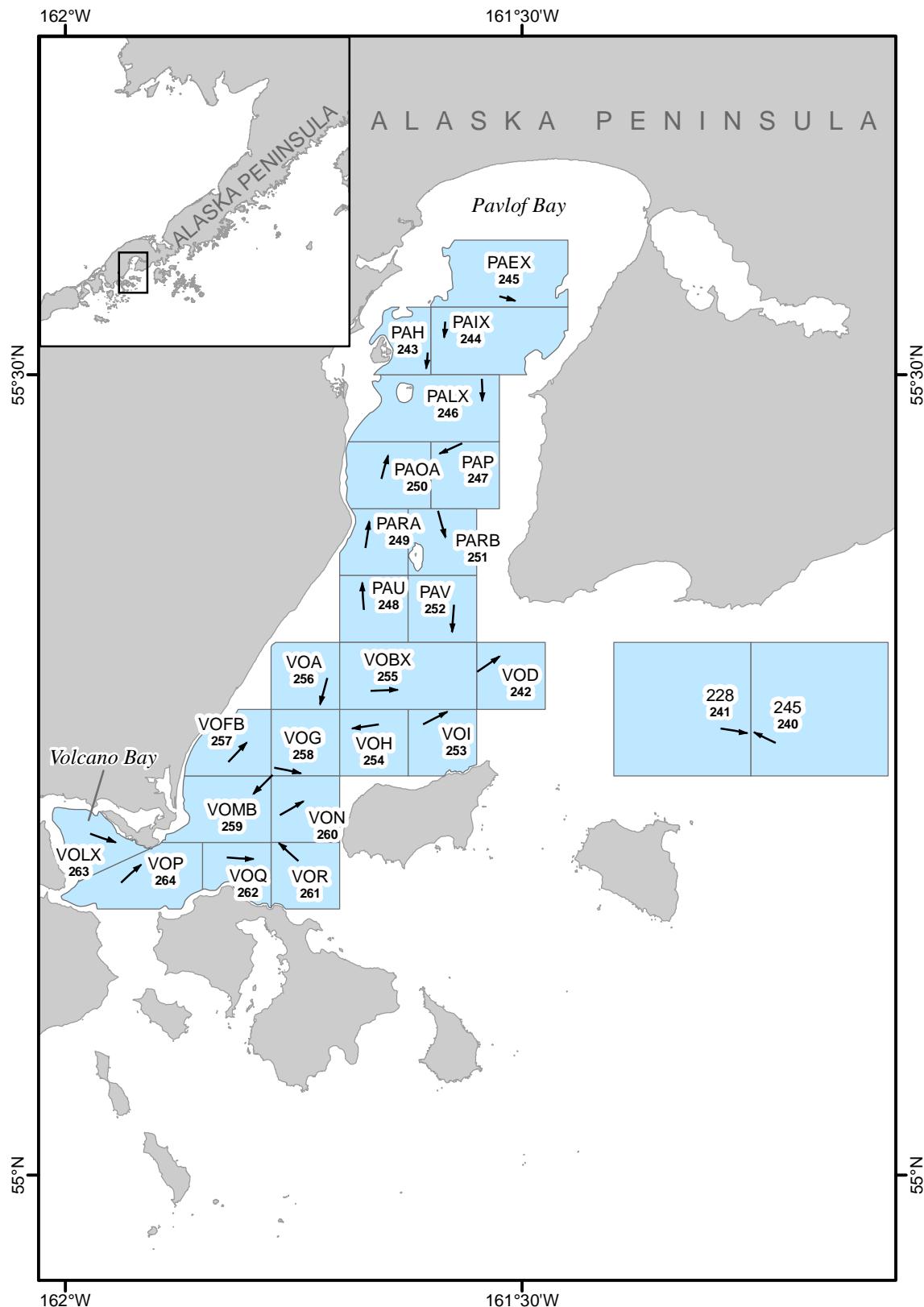
Appendix C6.—Shelikof Strait station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), September 2013.



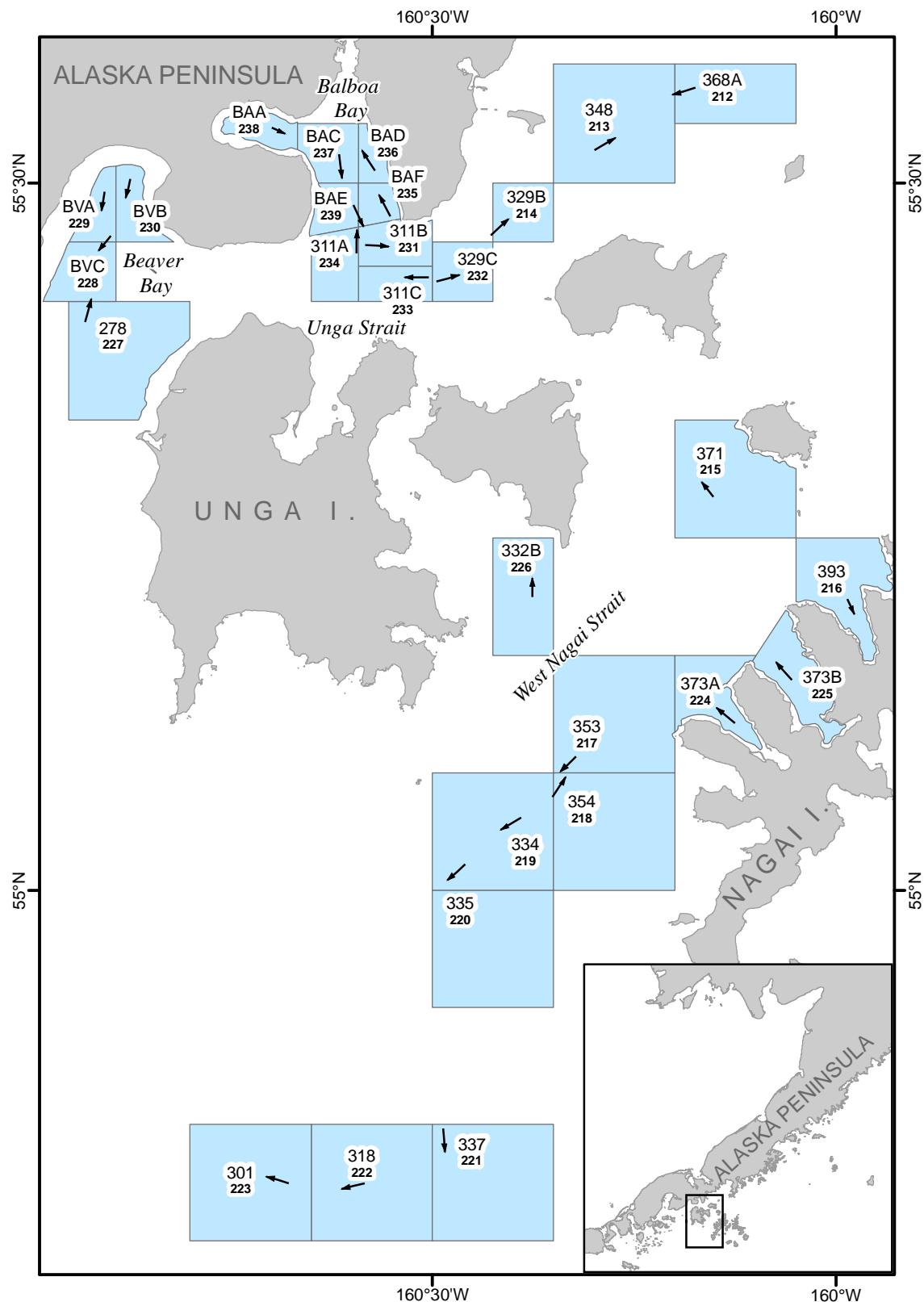
Appendix C7.—Uyak, Uganik, and Viekoda bays station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), September 2013.



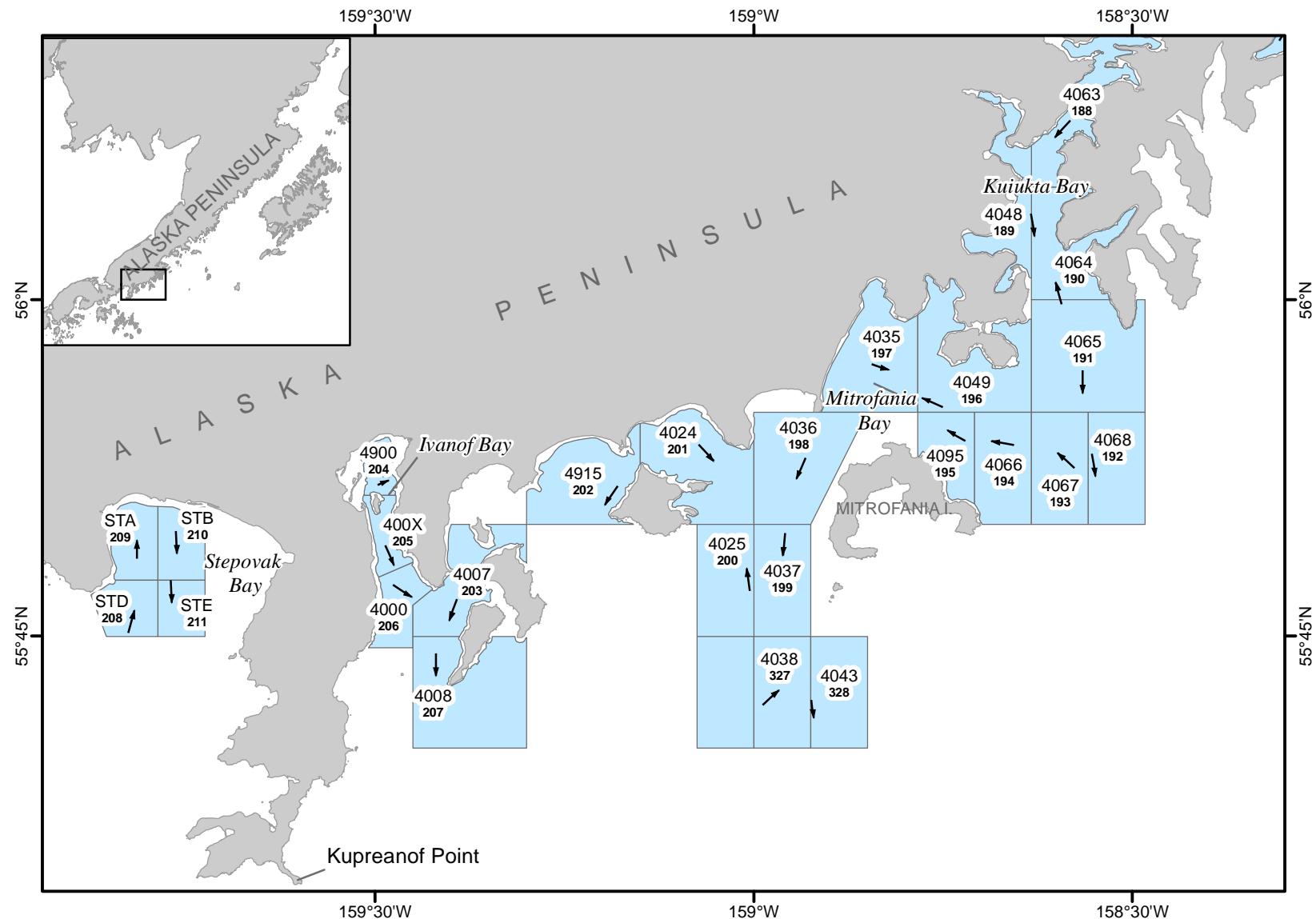
Appendix C8.—Morzhovoi Bay, Cold Bay, Belkovski Bay, Deer Island, and Sanak Island station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), August 2013.



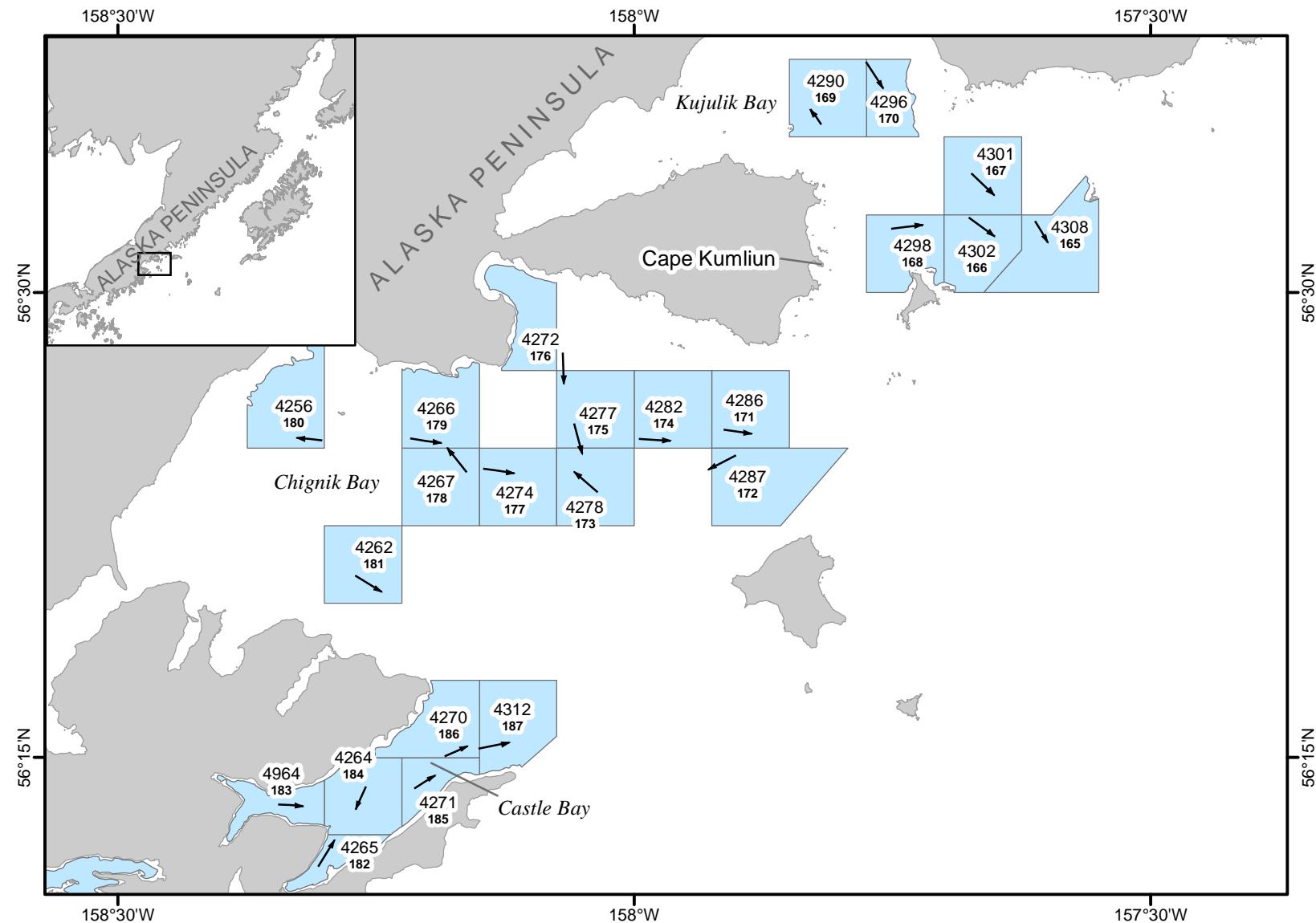
Appendix C9.—Pavlof and Volcano bays station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), August 2013.



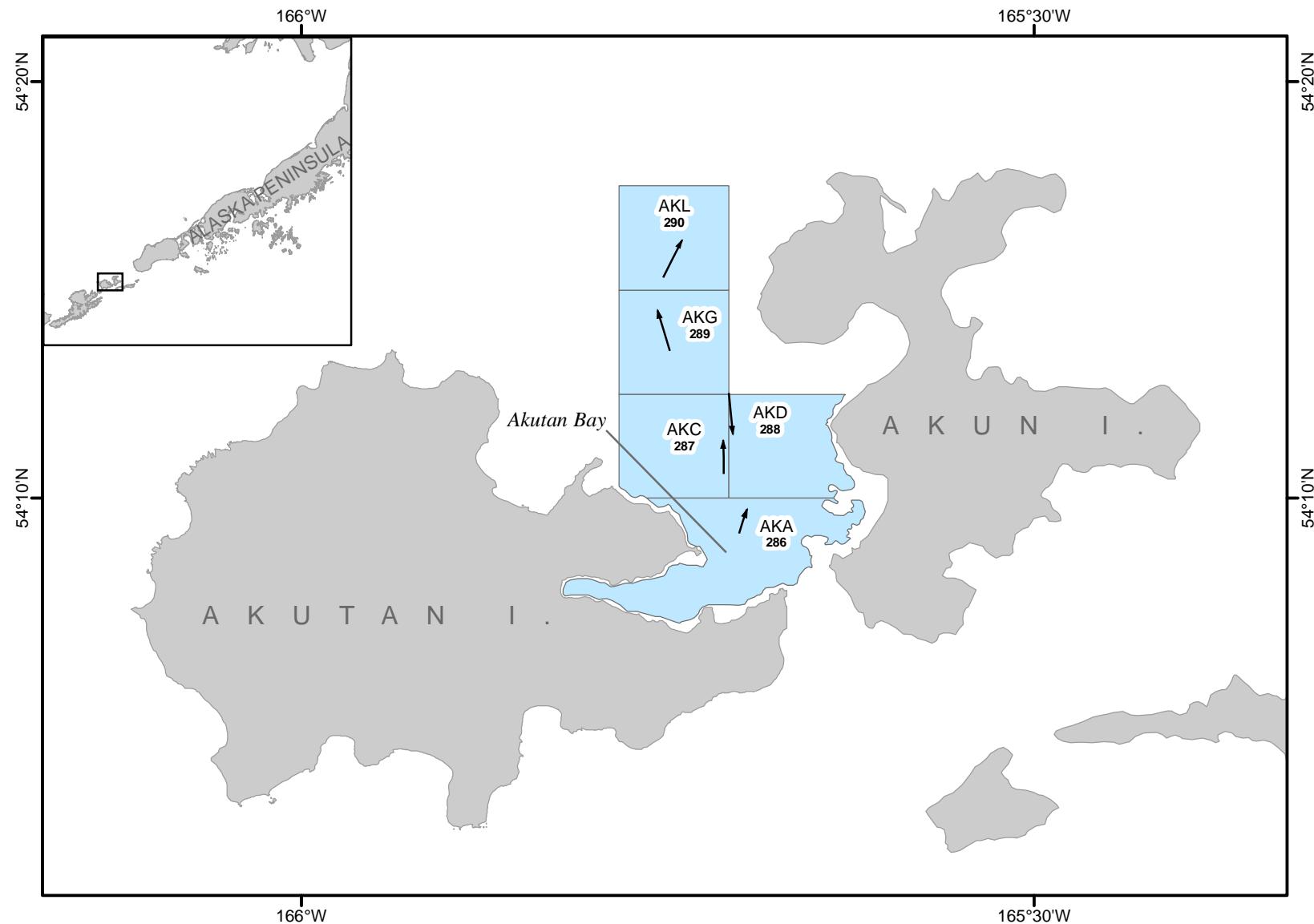
Appendix C10.—Unga Strait, Beaver Bay, Balboa Bay, and West Nagai Strait station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), August 2013.



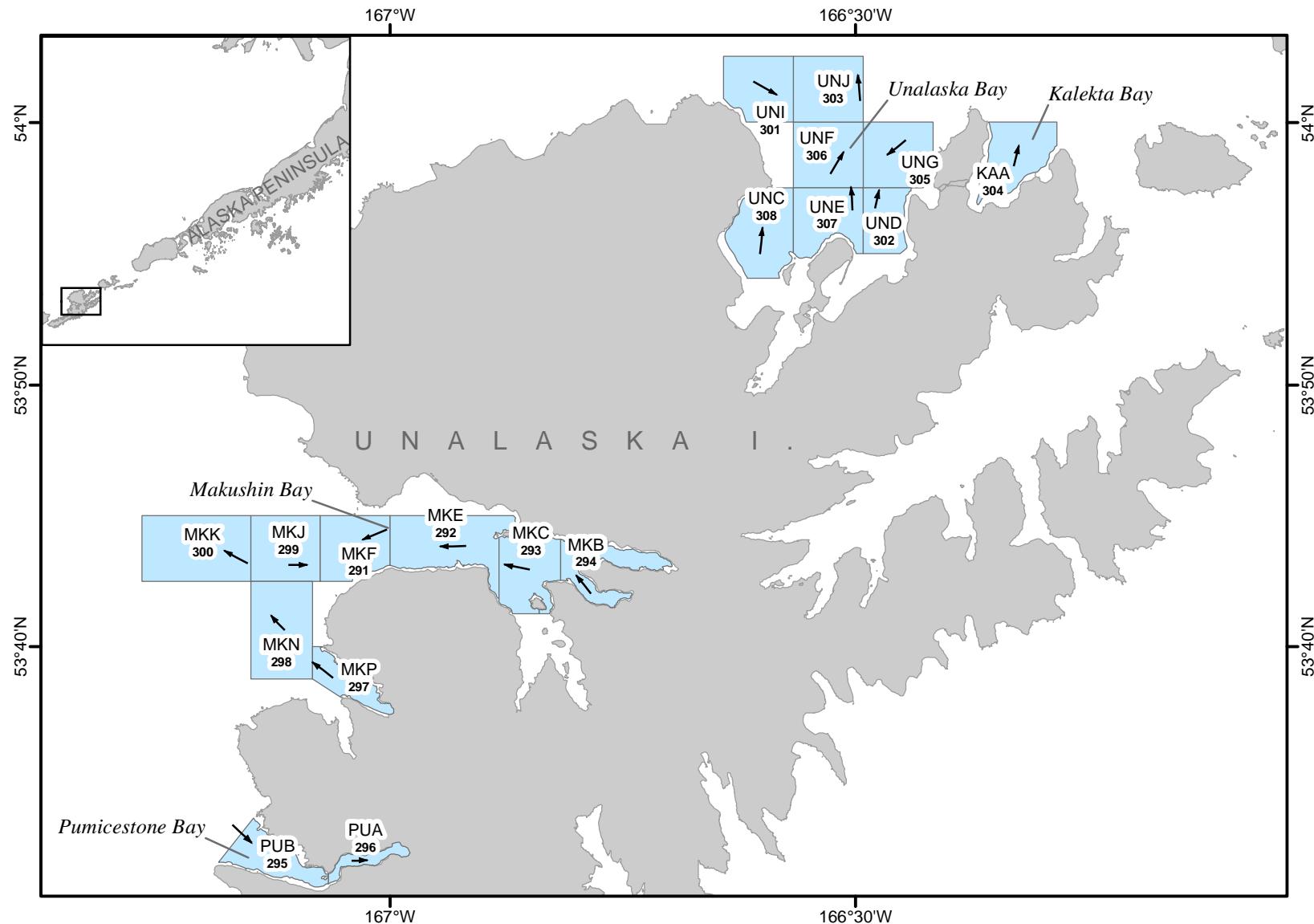
Appendix C11.—Stepovak, Ivanof, Kuiukta, and Mitrofania bays station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), August 2013.



Appendix C12.—Kujulik, Chignik, and Castle bays station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), August 2013.



Appendix C13.—Akutan Bay station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), July 2013.



Appendix C14.—Unalaska, Kalekta, Makushin, and Pumicestone bays station boundaries with station name, trawl haul number (bold), and location and direction of haul (arrow), July 2013.



**APPENDIX D. TANNER CRAB ABUNDANCE ESTIMATES  
BY STATION**

Appendix D1.—Tanner crab abundance estimates in the Kodiak District by station and section, 2013.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
<b>NORTHEAST Section</b>														
255	16	72,912	0	72,912	60,760	0	0	9,114	0	0	0	0	69,874	142,786
255X	15	1,065,108	61,990	1,127,098	964,270	25,921	25,921	20,737	5,184	0	0	5,184	1,042,034	2,169,132
256	19	550,638	0	550,638	489,878	0	0	3,798	0	0	0	0	493,675	1,044,313
257	14	205,065	0	205,065	189,875	0	3,798	0	0	3,798	0	3,798	197,470	402,535
283	21	354,990	8,658	363,649	294,382	0	2,886	5,772	0	2,886	0	2,886	305,927	669,575
283X	23	779,817	63,228	843,045	621,355	3,122	6,245	24,979	0	6,245	0	6,245	661,946	1,504,991
284	20	444,308	0	444,308	421,523	3,798	3,798	3,798	0	0	0	0	432,915	877,223
285	13	15,190	0	15,190	11,393	0	3,798	3,798	0	0	0	0	18,988	34,178
313	11	698,740	94,938	793,678	562,030	7,595	15,190	18,988	0	3,798	0	3,798	607,600	1,401,278
314	12	11,393	3,798	15,190	0	0	0	3,798	0	0	0	0	3,798	18,988
369X	4	122,533	11,139	133,672	100,254	11,139	0	0	0	11,139	0	11,139	122,533	256,205
395	43	26,583	3,798	30,380	11,393	15,190	7,595	11,393	3,798	3,798	0	7,595	53,165	83,545
420	44	170,888	3,798	174,685	197,470	0	7,595	11,393	3,798	0	0	3,798	220,255	394,940
421	45	37,975	0	37,975	30,380	0	3,798	11,393	0	3,798	0	3,798	49,368	87,343
443	47	4,286,428	0	4,286,428	5,226,309	0	0	0	0	0	0	0	5,226,309	9,512,738
444	46	636,081	0	636,081	631,334	0	0	4,747	0	0	0	4,747	640,828	1,276,909
CHA	9	10,802	0	10,802	12,962	540	0	0	0	0	0	0	13,502	24,304
CHB	8	221,551	998	222,549	192,636	22,016	2,202	1,101	1,101	0	0	1,101	219,055	441,604
CHE	6	3,038	0	3,038	1,519	0	0	0	0	0	0	0	1,519	4,557
CHF	7	341,486	34,512	375,998	339,091	24,355	3,747	1,873	0	7,494	0	7,494	376,560	752,558
CHG	5	363,092	0	363,092	360,535	0	0	0	0	0	0	0	360,535	723,626
CHJ	1	690,383	35,957	726,340	517,170	230,302	40,404	8,081	0	8,081	0	8,081	804,037	1,530,377
CHK	2	281,886	4,066	285,952	316,142	66,646	3,418	0	0	0	0	0	386,206	672,157
CHL	3	271,575	1,207	272,782	215,353	22,201	2,220	0	0	0	0	0	239,774	512,556
KZA	40	32,021	3,099	35,119	21,691	1,033	1,033	0	0	0	0	0	23,757	58,876
KZB	39	54,182	259	54,441	53,955	486	243	0	0	0	0	0	54,684	109,125
KZC	37	23,696	0	23,696	22,785	0	0	0	0	0	0	0	22,785	46,481
KZD	38	80,355	1,747	82,102	80,355	40,178	1,747	0	0	0	0	0	122,279	204,381
KZE	36	258,664	0	258,664	253,456	1,736	0	0	0	0	0	0	255,192	513,856
KZF	35	69,494	0	69,494	85,444	3,418	0	0	0	0	0	0	88,862	158,356
KZG	41	109,246	0	109,246	116,781	2,825	0	0	0	0	0	0	119,606	228,853
KZJ	34	74,051	949	75,001	115,824	6,646	949	1,899	0	0	0	0	125,318	200,318
KZK	42	97,311	3,560	100,871	110,365	59,336	17,801	0	0	0	0	0	187,502	288,373
KZO	31	137,211	89,584	226,795	63,846	185,735	50,787	8,706	0	0	0	0	309,074	535,869
KZR	33	34,431	13,165	47,595	11,139	93,165	61,773	18,228	21,266	7,089	0	28,355	212,660	260,255
KZS	32	22,101	13,671	35,772	14,355	16,633	6,380	4,101	3,190	2,051	0	5,241	46,709	82,482
MOEX	29	264,671	10,025	274,696	308,570	193,558	78,545	2,805	0	0	0	0	583,478	858,174

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Appendix D1.–Page 2 of 6.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
MOGX	10	559,964	8,749	568,714	571,630	5,833	2,916	11,666	0	2,916	0	2,916	594,962	1,163,676
MOLX	26	7,016,586	127,574	7,144,161	6,515,549	30,734	0	0	0	0	0	0	6,546,283	13,690,443
MONX	30	213,040	275,699	488,738	100,254	350,889	62,659	4,177	0	0	0	0	517,979	1,006,717
MOPX	28	931,405	0	931,405	1,101,199	0	0	0	0	0	0	0	1,101,199	2,032,604
MOQ	27	775,730	5,922	781,652	674,771	3,213	3,213	12,853	0	3,213	0	3,213	697,263	1,478,915
MOX	24	244,500	3,705	248,205	344,123	12,044	3,441	0	0	0	0	0	359,608	607,813
MOXX	25	1,492,562	38,468	1,531,030	1,624,760	65,317	0	8,165	0	0	0	0	1,698,242	3,229,272
Population Estimate		24,153,683	924,263	25,077,944	23,958,866	1,505,604	424,102	217,363	38,337	66,306	0	109,389	26,215,315	51,293,257
<b>EASTSIDE Section</b>														
486A	61	1,766	0	1,766	5,299	0	0	12,365	0	1,766	0	1,766	19,430	21,197
510B	60	43,825	0	43,825	43,825	0	0	15,936	0	7,968	0	7,968	67,730	111,555
510C	129	25,243	0	25,243	12,621	0	0	0	0	0	0	0	12,621	37,864
511A	131	9,494	0	9,494	3,798	0	1,899	13,291	0	5,696	0	5,696	24,684	34,178
511B	132	3,798	0	3,798	5,696	0	0	1,899	0	0	0	0	7,595	11,393
533A	70	374,054	0	374,054	412,029	1,899	1,899	17,089	0	3,798	0	3,798	436,713	810,766
533B	71	165,191	1,899	167,090	176,584	17,089	0	9,494	0	3,798	0	3,798	206,964	374,054
534B	130	21,836	0	21,836	25,633	0	0	0	0	0	0	0	25,633	47,469
534D	137	32,583	1,253	33,836	36,342	1,253	0	12,532	0	6,266	0	6,266	56,393	90,229
535A	133	3,798	949	4,747	2,848	0	949	9,494	0	949	0	949	14,241	18,988
535B	134	95,887	2,848	98,735	80,402	14,358	21,536	114,860	0	60,302	0	60,302	291,458	390,193
535C	138	99,684	3,798	103,482	105,381	6,646	949	2,848	0	4,747	0	4,747	120,571	224,053
535D	135	98,735	5,696	104,431	78,780	28,495	5,029	108,951	0	127,389	1,676	129,065	350,319	454,751
559	154	1,617,735	0	1,617,735	1,561,057	24,779	0	41,298	0	24,779	0	24,779	1,651,912	3,269,647
560	153	991,147	0	991,147	1,078,527	27,099	0	10,839	0	0	0	0	1,116,465	2,107,612
561	136	650,322	66,456	716,778	455,700	18,988	37,975	94,938	0	80,697	0	80,697	688,297	1,405,075
587	162	2,585,468	80,377	2,665,845	2,023,937	108,425	96,378	144,567	0	60,236	12,047	72,283	2,445,590	5,111,435
588	161	1,454,442	0	1,454,442	1,482,256	28,369	0	21,276	0	21,276	0	21,276	1,553,178	3,007,620
589	141	75,950	7,595	83,545	79,748	0	7,595	22,785	0	18,988	0	18,988	129,115	212,660
619	160	1,418,441	36,001	1,454,443	1,026,124	78,468	6,036	24,144	0	12,072	0	12,072	1,146,845	2,601,288
620	145	1,053,129	158,274	1,211,402	1,270,947	162,563	7,389	36,946	0	22,168	0	22,168	1,500,013	2,711,415
621	142	49,368	0	49,368	15,190	0	7,595	11,393	0	7,595	0	7,595	41,773	91,140
654	164	110,128	15,190	125,318	132,913	18,988	15,190	53,165	0	7,595	0	7,595	227,850	353,168
655	144	672,158	0	672,158	577,220	3,798	3,798	18,988	0	15,190	0	15,190	618,993	1,291,150
656	143	113,925	26,583	140,508	79,748	7,595	0	11,393	0	15,190	0	15,190	113,925	254,433
695	148	1,261,345	26,007	1,287,353	1,815,137	43,424	8,685	43,424	0	26,055	0	26,055	1,936,725	3,224,077
696	149	303,800	7,595	311,395	307,598	3,798	0	11,393	0	15,190	0	15,190	337,978	649,373
KLA	64	57,140	0	57,140	92,659	6,177	1,544	0	0	0	0	0	100,381	157,520
KLB	65	206,670	18,492	225,161	408,129	10,203	0	0	0	0	0	0	418,333	643,494

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Appendix D1.–Page 3 of 6.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
KLC	66	205,047	1,020	206,068	235,947	10,512	0	1,168	0	0	0	0	247,627	453,695
KLE	74	118,621	590	119,211	133,338	4,211	0	2,105	0	702	0	702	140,356	259,567
KLF	73	292,027	34,801	326,828	198,378	468,173	138,865	3,968	0	0	0	0	809,384	1,136,212
KLG	67	503,871	28,387	532,258	440,832	28,654	0	6,612	0	2,204	0	2,204	478,303	1,010,560
KLH	72	178,366	1,757	180,123	176,976	35,153	1,212	16,970	0	21,819	2,424	24,243	254,554	434,677
KLI	68	823,108	0	823,108	816,964	11,840	0	0	0	0	0	0	828,804	1,651,912
KLL	69	213,082	0	213,082	244,728	1,055	0	1,055	0	0	0	0	246,837	459,919
UGAA	50	232,911	9,458	242,369	171,629	150,883	43,379	13,202	9,430	0	7,544	16,974	396,067	638,436
UGAB	49	85,744	3,047	88,791	41,610	60,402	16,778	5,369	4,698	671	4,698	10,067	134,226	223,017
UGAC	48	1,695	0	1,695	1,130	0	0	0	0	0	0	0	1,130	2,825
UGB	51	137,969	0	137,969	257,811	1,167	2,333	0	0	4,666	0	4,666	265,977	403,946
UGC	52	2,300,829	0	2,300,829	1,218,093	6,030	0	12,060	0	0	0	0	1,236,184	3,537,013
UGD	53	324,285	0	324,285	355,640	10,308	0	0	0	0	0	0	365,949	690,234
UGE	57	514,728	2,340	517,068	548,429	8,394	0	2,798	0	0	0	0	559,621	1,076,689
UGF	54	1,412,453	0	1,412,453	1,375,341	0	0	6,167	0	0	0	0	1,381,509	2,793,962
UGG	55	1,446,435	0	1,446,435	1,881,824	0	0	0	0	0	0	0	1,881,824	3,328,259
UGI	58	6,658,970	0	6,658,970	6,240,292	0	0	160,832	0	32,166	0	32,166	6,433,291	13,092,261
UGJ	56	1,722,437	0	1,722,437	1,664,119	0	0	0	0	0	0	0	1,664,119	3,386,556
UGM	59	274,331	0	274,331	315,321	1,585	1,585	4,754	0	0	0	0	323,243	597,575
Population Estimate		31,043,971	540,413	31,584,385	29,714,530	1,410,781	428,598	1,102,368	14,128	611,938	28,389	654,455	33,310,730	64,895,112
<b>SOUTHEAST Section</b>														
585X	127	371,775	12,532	384,307	484,561	29,241	20,886	29,241	0	8,355	0	8,355	572,283	956,590
586	128	1,458,769	14,661	1,473,430	1,549,962	52,926	37,804	30,243	0	7,561	0	7,561	1,678,495	3,151,925
614	85	635,417	34,948	670,365	548,308	22,380	18,650	52,220	0	93,250	3,730	96,980	738,538	1,408,903
615	84	942,691	13,215	955,907	817,640	5,208	5,208	130,197	0	156,237	0	156,237	1,114,490	2,070,397
618A	163	206,964	13,291	220,255	225,951	30,380	9,494	7,595	0	5,696	0	5,696	279,116	499,371
651	126	881,020	26,583	907,603	622,790	37,975	0	30,380	0	15,190	0	15,190	706,335	1,613,938
688	89	930,388	4,747	935,134	621,841	18,988	14,241	42,722	0	28,481	0	28,481	726,272	1,661,406
725	125	75,950	15,190	91,140	53,165	64,558	3,798	11,393	0	0	0	0	132,913	224,053
726	90	901,906	42,722	944,628	863,931	61,709	4,747	0	0	0	0	0	930,388	1,875,016
727	91	389,244	0	389,244	455,700	18,988	0	4,747	0	0	0	0	479,434	868,678
728	92	545,891	9,494	555,384	446,206	4,747	4,747	4,747	0	4,747	4,747	9,494	469,941	1,025,325
729	93	156,647	0	156,647	194,622	0	0	4,747	0	4,747	0	4,747	204,116	360,763
759	96	588,613	4,747	593,359	536,397	4,747	14,241	9,494	0	0	0	0	564,878	1,158,238
760	95	1,473,059	22,207	1,495,266	1,106,022	0	0	23,734	0	14,241	0	14,241	1,143,997	2,639,262
761	94	251,584	0	251,584	294,306	0	0	4,747	0	0	0	0	299,053	550,638
THA	88	859,066	4,232	863,298	826,097	11,581	0	0	0	0	0	0	837,678	1,700,976

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Appendix D1.–Page 4 of 6.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
THC	86	348,176	1,619	349,795	311,282	9,200	0	4,600	0	3,067	0	3,067	328,150	677,945
THD	87	397,313	0	397,313	319,988	3,497	3,497	8,743	0	12,240	0	12,240	347,965	745,278
THF	81	642,043	74,491	716,534	435,992	2,295	11,473	9,179	0	2,295	0	2,295	461,233	1,177,768
THG	82	488,114	6,748	494,862	453,264	4,358	2,179	17,433	0	15,254	0	15,254	492,488	987,350
THH	83	241,369	1,063	242,432	254,129	1,063	0	0	0	0	0	0	255,192	497,624
THI	80	491,643	0	491,643	397,189	57,372	0	0	0	0	0	0	454,561	946,204
THJ	79	517,730	7,540	525,270	421,209	165,766	2,717	2,717	0	0	0	0	592,410	1,117,680
THK	78	405,338	2,058	407,396	309,147	55,818	4,294	40,790	32,203	36,497	4,294	72,993	483,042	890,438
THL	77	288,629	0	288,629	244,540	5,767	1,153	2,307	0	0	0	0	253,768	542,397
THM	76	193,590	14,190	207,780	87,821	59,767	20,736	26,834	0	24,395	0	24,395	219,552	427,333
THN	75	141,828	1,433	143,261	146,188	15,757	0	10,505	0	5,252	875	6,128	178,577	321,838
Population Estimate		14,824,757	327,711	15,152,466	13,028,248	744,088	179,865	509,315	32,203	437,505	13,646	483,354	14,944,865	30,097,334
<b>SOUTHWEST Section</b>														
645B	106	909,020	8,456	917,476	1,013,227	0	0	13,631	0	4,544	0	4,544	1,031,401	1,948,877
646A	105	3,541,229	0	3,541,229	3,906,033	0	0	0	0	16,800	0	16,800	3,922,833	7,464,062
646B	104	2,779,405	0	2,779,405	2,492,730	0	0	12,526	0	0	0	0	2,505,256	5,284,662
646C	108	2,555,186	0	2,555,186	2,334,399	0	2,582	42,608	0	24,532	0	24,532	2,404,121	4,959,307
646D	103	344,388	0	344,388	848,997	0	4,203	16,812	0	4,203	0	4,203	874,215	1,218,603
682B	107	261,542	155,727	417,269	100,726	0	0	89,687	0	95,207	1,380	96,586	287,000	704,269
683A	109	311,580	2,898	314,479	286,357	0	0	38,888	0	40,656	3,535	44,191	369,436	683,915
683B	111	501,265	11,139	512,404	414,565	2,497	4,995	82,414	0	19,979	0	19,979	524,450	1,036,854
683D	112	423,744	1,971	425,715	363,552	0	0	1,874	0	0	0	0	365,426	791,141
684A	110	872,703	0	872,703	812,912	0	0	0	0	0	0	0	812,912	1,685,615
684B	114	24,608	0	24,608	21,418	0	0	456	0	0	0	0	21,874	46,481
684C	113	213,420	0	213,420	183,419	0	0	0	0	0	0	0	183,419	396,839
ALA	115	272,161	2,763	274,924	298,449	1,492	0	0	0	0	0	0	299,942	574,866
ALB	116	19,671	7,868	27,539	19,671	0	0	1,967	0	0	0	0	21,638	49,178
ALC	121	18,900	3,600	22,500	13,950	0	900	39,150	0	28,350	450	28,800	82,801	105,301
ALD	117	133,482	12,987	146,470	61,330	36,076	722	11,544	0	2,886	0	2,886	112,558	259,027
ALF	118	1,641,232	18,988	1,660,220	1,488,145	0	0	13,054	0	23,734	0	23,734	1,524,934	3,185,153
ALG	124	577,046	8,832	585,878	462,098	35,914	31,126	4,789	0	2,394	0	2,394	536,321	1,122,199
ALH	119	1,759,837	2,677	1,762,515	1,577,785	16,063	2,677	892	0	892	0	892	1,598,311	3,360,825
ALI	120	182,337	0	182,337	209,216	2,405	4,810	20,441	1,202	37,274	0	38,476	275,347	457,684
ALJ	123	161,242	0	161,242	113,712	48,183	17,346	12,528	0	2,891	0	2,891	194,660	355,902
ALK	122	158,882	802	159,685	130,740	55,742	23,310	0	0	0	0	0	209,793	369,478
ALL	101	442,029	0	442,029	257,943	43,935	1,417	2,835	0	2,835	0	2,835	308,965	750,994
ALM	102	286,512	1,440	287,952	317,872	178,008	35,602	0	0	0	0	0	531,481	819,433
ALO	100	354,427	2,097	356,524	379,691	47,733	4,339	2,170	0	0	0	0	433,933	790,457

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Appendix D1.–Page 5 of 6.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
ALP	99	345,360	0	345,360	330,920	48,380	3,870	3,870	0	0	0	0	387,041	732,401
ALQ	98	174,169	0	174,169	269,438	6,736	0	1,347	0	0	0	0	277,521	451,690
ALR	97	83,530	0	83,530	97,748	4,739	592	0	0	592	592	1,185	104,264	187,794
Population Estimate		19,348,907	242,245	19,591,156	18,807,043	527,903	138,491	413,483	1,202	307,769	5,957	314,928	20,201,853	39,793,007
<b>WESTSIDE Section</b>														
KUF	330	46,477	12,494	58,971	30,485	15,492	1,499	1,499	0	0	0	0	48,976	107,946
KUG	331	684	684	1,367	684	0	0	0	0	0	0	0	684	2,051
KUI	334	35,791	9,374	45,164	30,110	7,101	568	0	0	0	0	0	37,779	82,943
KUJ	335	33,084	83,461	116,545	16,542	41,355	39,099	14,286	0	0	0	0	111,282	227,827
KUK	333	85,232	135,235	220,468	14,947	58,542	9,965	3,114	0	3,737	0	3,737	90,305	310,772
KUL	337	2,100	750	2,850	600	0	300	0	0	0	0	0	900	3,750
KULX	336	15,134	2,368	17,502	10,720	18,042	12,028	7,060	261	1,307	0	1,569	49,418	66,920
KUM	332	6,507	0	6,507	18,128	0	0	0	0	0	0	0	18,128	24,635
KUNX	349	29,195	28,724	57,919	7,769	96,551	86,563	27,745	1,110	1,110	0	2,220	220,847	278,767
KUP	348	48,329	15,324	63,652	42,435	27,700	16,502	1,768	0	589	0	589	88,995	152,647
KUQ	347	107,545	11,848	119,393	86,583	66,532	15,494	1,823	0	911	0	911	171,343	290,737
KUS	346	40,867	52,697	93,564	20,496	63,537	52,606	4,099	0	683	0	683	141,422	234,986
KUT	345	44,534	3,330	47,864	62,847	16,232	6,243	1,665	0	0	0	0	86,987	134,851
KUU	342	27,654	105,349	133,004	0	40,235	60,763	44,341	5,748	13,138	821	19,707	165,045	298,049
KUV	343	684	4,101	4,785	684	228	456	2,051	0	1,139	0	1,139	4,557	9,342
KUW	344	2,867	287	3,154	3,154	0	0	0	0	0	0	0	3,154	6,308
KUX	340	4,067	2,034	6,101	4,745	12,427	12,879	7,682	2,034	678	452	3,163	40,897	46,998
KUXX	341	11,197	94,616	105,814	888	9,767	20,867	23,530	19,979	13,319	1,332	34,630	89,682	195,495
KUY	338	2,260	0	2,260	2,937	226	226	0	0	0	0	0	3,389	5,649
MAA	360	2,332	2,798	5,130	1,865	933	1,865	1,399	0	0	0	0	6,062	11,192
PAA	361	2,673	0	2,673	6,015	0	0	0	0	0	0	0	6,015	8,689
RAA	359	3,573	4,764	8,336	3,870	16,077	12,207	595	0	0	0	0	32,750	41,086
UYBX	350	33,281	0	33,281	22,821	3,804	951	951	0	0	0	0	28,527	61,808
UYEX	353	340,323	14,254	354,577	347,626	70,378	10,663	0	0	0	0	0	428,668	783,245
UYFX	351	230,749	19,534	250,284	225,503	74,590	46,835	3,469	0	0	0	0	350,397	600,681
UYHX	352	46,481	911	47,393	51,077	2,467	0	0	0	0	0	0	53,545	100,938
UYKX	354	229,418	19,735	249,152	291,740	115,390	23,949	2,177	0	0	0	0	433,255	682,408
UYMX	357	297,286	89,968	387,254	108,417	140,781	43,691	16,182	1,618	12,945	0	14,564	323,634	710,887
UYO	358	16,468	31,726	48,194	8,001	3,908	744	186	186	186	0	372	13,212	61,406
UYQX	356	96,003	970	96,973	63,844	41,865	1,047	0	0	0	0	0	106,755	203,728
UYSS	355	3,119	446	3,565	891	1,337	6,684	6,238	3,119	0	1,337	4,456	19,605	23,170
Population Estimate		1,845,914	747,782	2,593,696	1,486,424	945,497	484,694	171,860	34,055	49,742	3,942	87,740	3,176,215	5,769,911

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Appendix D1.–Page 6 of 6.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
<b>NORTH MAINLAND Section</b>														
117	373	936,179	0	936,179	936,179	0	0	0	0	0	0	0	936,179	1,872,357
118	370	144,305	0	144,305	174,685	0	0	0	0	0	0	0	174,685	318,990
119	369	177,217	0	177,217	139,242	0	0	0	0	0	0	0	139,242	316,458
120	363	90,191	4,747	94,938	104,431	4,747	0	4,747	0	0	0	0	113,925	208,863
121	362	52,216	0	52,216	52,216	9,494	14,241	9,494	0	0	0	0	85,444	137,659
144	371	20,165	0	20,165	33,608	0	0	0	0	0	0	0	33,608	53,773
145	372	104,431	0	104,431	80,697	0	0	0	0	0	0	0	80,697	185,128
146	374	109,178	9,494	118,672	132,913	4,747	9,494	0	0	0	0	0	147,153	265,825
147	375	28,481	75,950	104,431	23,734	42,722	14,241	28,481	0	37,975	0	37,975	147,153	251,584
171	387	24,659	0	24,659	22,762	0	4,426	8,220	27,820	1,265	12,646	41,731	77,139	101,798
171X	386	70,801	9,410	80,211	2,913	30,098	81,555	42,719	27,185	1,942	5,825	34,952	192,237	272,448
171Y	382	35,423	0	35,423	33,813	0	0	0	0	0	0	0	33,813	69,236
172	381	78,988	0	78,988	74,051	0	0	0	0	0	0	0	74,051	153,039
173	385	113,925	71,203	185,128	199,369	33,228	4,747	4,747	0	4,747	0	4,747	246,838	431,966
174	376	71,203	0	71,203	52,216	4,747	9,494	9,494	0	9,494	0	9,494	85,444	156,647
198	383	602,853	14,241	617,094	674,056	4,747	0	0	0	0	4,747	4,747	683,550	1,300,644
199	384	137,659	56,963	194,622	132,913	42,722	0	9,494	0	4,747	4,747	9,494	194,622	389,244
200	377	99,684	9,494	109,178	147,153	14,241	4,747	0	0	0	0	0	166,141	275,319
222	380	31,329	37,595	68,925	75,191	0	0	0	0	0	0	0	75,191	144,115
223	379	71,203	42,722	113,925	104,431	33,228	14,241	14,241	0	9,494	4,747	14,241	180,381	294,306
224	378	142,406	90,191	232,597	137,659	33,228	18,988	4,747	0	4,747	0	4,747	199,369	431,966
31	366	27,798	0	27,798	32,431	0	0	0	0	0	0	0	32,431	60,228
60	367	194,094	0	194,094	177,217	0	0	0	0	0	0	0	177,217	371,311
61	365	0	4,747	4,747	4,747	0	0	0	0	0	0	0	4,747	9,494
90	368	150,077	0	150,077	130,330	0	0	0	0	0	0	0	130,330	280,407
91	364	14,241	4,747	18,988	42,722	14,241	0	0	0	0	0	0	56,963	75,950
Population Estimate		3,528,706	431,504	3,960,211	3,721,679	272,190	176,174	136,384	55,005	74,411	32,712	162,128	4,468,550	8,428,755
<b>Kodiak District Total</b>		94,745,938	3,213,918	97,959,858	90,716,790	5,406,063	1,831,924	2,550,773	174,930	1,547,671	84,646	1,811,994	102,317,528	200,277,376

Appendix D2.—Tanner crab abundance estimates in the South Peninsula District by station, sampling locale, and section, 2013.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
<b>SANAK ISLAND</b>														
113	318	149,527	8,544	158,071	136,710	17,089	0	0	0	0	0	0	153,799	311,870
125	313	98,260	0	98,260	98,260	4,272	0	4,272	0	4,272	0	4,272	111,077	209,337
126	312	74,279	0	74,279	23,212	0	0	0	0	4,642	0	4,642	27,855	102,134
137	314	94,938	4,747	99,684	99,684	0	9,494	0	0	4,747	0	4,747	113,925	213,609
138A	315	87,153	0	87,153	84,589	0	0	0	0	0	0	0	84,589	171,742
138B	317	13,255	1,020	14,275	19,373	0	0	1,020	0	0	0	0	20,393	34,667
138C	316	151,292	3,152	154,444	160,748	6,304	3,152	9,456	0	9,456	0	9,456	189,116	343,560
Population Estimate		668,704	17,463	686,166	622,576	27,665	12,646	14,748	0	23,117	0	23,117	700,754	1,386,919
<b>MORZHVOI BAY</b>														
87AX	277	399,024	85,158	484,181	480,384	0	0	39,985	0	268,791	31,100	299,891	820,260	1,304,441
87D	278	55,292	10,861	66,152	63,190	987	0	22,709	0	133,292	10,861	144,153	231,040	297,192
MOB	285	36,709	0	36,709	33,772	0	0	1,468	0	0	0	0	35,241	71,950
MOD	284	212,394	0	212,394	240,397	3,680	1,227	3,680	0	0	0	0	248,983	461,377
MOF	283	196,995	0	196,995	206,489	2,373	0	2,373	0	0	0	0	211,236	408,231
MOG	281	398,738	0	398,738	505,058	25,900	0	2,590	0	0	0	0	533,549	932,286
MOH	282	151,839	0	151,839	150,991	3,337	0	6,674	0	11,679	0	11,679	172,680	324,519
MOI	280	243,510	1,218	244,728	338,192	200,802	21,137	0	0	0	0	0	560,131	804,859
MOK	274	474,522	6,811	481,333	510,099	0	0	0	0	2,563	0	2,563	512,663	993,996
MOL	279	781,652	6,329	787,981	804,681	22,731	10,147	8,439	0	13,713	0	13,713	859,712	1,647,693
MOOX	273	22,352	22,352	44,704	9,934	9,934	17,385	4,967	2,484	74,507	4,967	81,958	124,178	168,882
MORX	276	2,205,269	0	2,205,269	2,289,735	0	0	0	0	16,836	0	16,836	2,306,571	4,511,840
MOSX	275	429,963	6,142	436,105	463,506	2,952	0	0	0	14,761	0	14,761	481,219	917,324
Population Estimate		5,608,259	138,871	5,747,128	6,096,428	272,696	49,896	92,885	2,484	536,142	46,928	585,554	7,097,463	12,844,590
<b>COLD BAY/BELKOF SKI BAY</b>														
156A	265	544,690	10,949	555,638	477,320	7,381	0	0	0	2,460	0	2,460	487,162	1,042,800
157A	266	44,695	0	44,695	23,279	0	0	0	0	0	0	0	23,279	67,974
BEBX	270	56,385	0	56,385	66,566	3,916	0	0	0	0	0	0	70,482	126,867
BECX	271	395,706	1,969	397,674	409,512	1,735	1,735	1,735	0	0	0	0	414,717	812,392
BEE	269	777,157	4,178	781,336	654,055	163,514	8,176	8,176	0	8,176	0	8,176	842,096	1,623,431
BEF	268	347,155	0	347,155	359,389	3,439	0	1,720	0	0	0	0	364,548	711,703
BEG	267	89,925	0	89,925	83,180	3,372	0	0	0	0	0	0	86,553	176,477
COB	319	65,499	0	65,499	97,313	3,743	0	0	0	0	0	0	101,056	166,555
COC	320	22,982	0	22,982	17,575	0	0	0	0	0	0	0	17,575	40,557
COE	321	248,897	1,871	250,769	202,112	7,486	3,743	14,971	11,228	0	0	11,228	239,540	490,309
COF	322	240,913	9,067	249,980	364,155	0	1,839	9,196	27,588	3,678	0	31,266	406,456	656,436
COGA	325	40,961	3,103	44,064	45,305	1,862	5,586	11,171	26,687	1,241	2,482	30,410	94,334	138,398

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Appendix D2.—Page 2 of 3.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
COGB	323	50,604	0	50,604	50,778	1,861	0	0	0	266	0	266	52,905	103,509
COH	324	39,251	0	39,251	40,983	0	0	0	0	0	0	0	40,983	80,234
COM	326	43,474	11,484	54,957	35,271	820	12,304	46,755	4,101	59,879	0	63,980	159,130	214,088
COO	272	190,738	993	191,731	156,961	0	1,987	993	993	0	0	993	160,935	352,666
Population Estimate		3,199,032	43,614	3,242,645	3,083,754	199,129	35,370	94,717	70,597	75,700	2,482	148,779	3,561,751	6,804,396
<b>PAVLOF BAY/VOLCANO BAY</b>														
228	241	104,252	2,833	107,085	82,627	661	2,644	15,864	0	28,424	661	29,085	130,882	237,967
245	240	202,783	3,104	205,887	235,968	1,333	2,666	21,330	0	6,666	0	6,666	267,963	473,850
PAEX	245	24,547	0	24,547	27,615	0	0	0	0	0	0	0	27,615	52,162
PAH	243	166,675	2,208	168,882	225,069	72,555	2,961	2,961	0	0	0	0	303,547	472,429
PAIX	244	285,615	0	285,615	370,451	8,484	0	0	0	0	0	0	378,935	664,550
PALX	246	481,808	2,373	484,181	764,674	76,045	4,225	0	0	0	0	0	844,944	1,329,125
PAOA	250	70,321	4,441	74,762	68,722	11,534	3,364	8,170	3,845	961	0	4,806	96,595	171,357
PAP	247	177,966	1,023	178,989	215,605	51,467	5,564	5,564	0	0	0	0	278,200	457,189
PARA	249	163,845	2,534	166,379	303,211	44,329	3,546	3,546	1,773	0	0	1,773	356,406	522,785
PARB	251	238,026	24,986	263,012	122,205	86,466	14,987	13,835	10,376	1,153	0	11,529	249,022	512,034
PAU	248	82,596	0	82,596	72,153	26,583	3,798	9,494	3,798	2,848	0	6,646	118,672	201,268
PAV	252	301,064	1,521	302,585	259,331	161,036	8,366	4,183	0	0	0	0	432,915	735,500
VOA	256	72,409	0	72,409	127,956	11,903	1,984	0	0	1,984	0	1,984	143,827	216,236
VOBX	255	432,906	11,648	444,554	411,002	20,970	4,194	2,097	0	6,291	0	6,291	444,554	889,107
VOD	242	792,563	0	792,563	878,949	30,519	0	0	0	0	0	0	909,468	1,702,030
VOFB	257	101,589	51,171	152,760	108,721	4,817	2,064	3,441	0	6,193	0	6,193	125,235	277,995
VOG	258	204,154	21,436	225,590	126,575	35,727	10,208	9,187	6,125	4,083	0	10,208	191,904	417,494
VOH	254	223,126	11,857	234,983	190,683	18,298	4,815	0	963	3,852	0	4,815	218,611	453,595
VOI	253	571,629	13,356	584,985	593,327	9,082	0	3,027	0	3,027	0	3,027	608,463	1,193,448
VOLX	263	48,304	103,854	152,158	43,474	10,868	14,491	66,418	3,623	50,719	0	54,342	189,594	341,752
VOMB	259	124,564	24,012	148,576	117,060	3,752	3,752	2,251	0	3,752	0	3,752	130,567	279,144
VON	260	85,304	0	85,304	71,417	16,862	2,976	0	0	992	0	992	92,247	177,551
VOP	264	279,116	0	279,116	367,037	45,075	15,025	6,439	6,439	4,293	0	10,732	444,307	723,424
VOQ	262	132,505	1,410	133,915	173,452	12,781	4,565	913	0	0	0	0	191,710	325,625
VOR	261	11,228	0	11,228	2,807	936	0	0	0	0	0	0	3,743	14,971
Population Estimate		5,378,895	283,767	5,662,661	5,960,091	762,083	116,195	178,720	36,942	125,238	661	162,841	7,179,926	12,842,588
<b>BEAVER BAY/BALBOA BAY/UNGA STRAIT</b>														
278	227	3,164	0	3,164	3,164	3,164	0	0	0	0	0	0	6,328	9,492
311A	234	122,627	2,055	124,683	149,345	9,591	0	0	0	0	0	0	158,936	283,619
311B	231	152,094	905	153,000	123,124	1,811	0	0	0	0	0	0	124,935	277,934
311C	233	9,933	52,720	62,653	9,169	0	1,528	4,584	0	2,292	0	2,292	17,573	80,226

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Appendix D2.—Page 3 of 3.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
329B	214	131,014	11,393	142,406	107,279	5,696	1,899	8,544	0	2,848	0	2,848	126,267	268,673
329C	232	43,671	16,139	59,811	42,722	5,696	949	0	0	0	0	0	49,368	109,178
348	213	668,360	26,583	694,943	486,080	7,595	15,190	26,583	0	7,595	0	7,595	543,043	1,237,985
BAA	238	23,038	0	23,038	22,152	0	0	0	0	0	0	0	22,152	45,190
BAC	237	190,574	0	190,574	222,724	6,394	1,066	0	0	0	0	0	230,183	420,757
BAD	236	222,764	0	222,764	257,927	10,065	1,258	0	0	0	0	0	269,250	492,015
BAE	239	83,969	564	84,532	111,019	1,691	0	0	0	0	0	0	112,710	197,242
BAF	235	4,320	0	4,320	4,320	0	0	480	0	0	0	0	4,800	9,120
BVA	229	5,070	0	5,070	3,380	0	0	0	0	0	0	0	3,380	8,449
BVC	228	1,044	0	1,044	2,089	0	0	2,089	0	0	0	0	4,177	5,222
Population Estimate		1,661,642	110,359	1,772,002	1,544,494	51,703	21,890	42,280	0	12,735	0	12,735	1,673,102	3,445,102
<b>STEPOVAK BAY</b>														
368A	212	271,711	6,038	277,749	233,470	8,051	2,013	6,038	0	0	0	0	249,572	527,321
STA	209	99,935	0	99,935	101,097	1,162	0	0	0	0	0	0	102,259	202,194
STB	210	88,558	0	88,558	107,773	0	0	0	0	0	0	0	107,773	196,331
STD	208	45,319	1,007	46,326	50,355	0	0	0	0	0	0	0	50,355	96,681
STE	211	37,158	0	37,158	41,286	0	688	0	0	0	0	0	41,975	79,132
Population Estimate		542,681	7,045	549,726	533,981	9,213	2,701	6,038	0	0	0	0	551,934	1,101,659
<b>WEST NAGAI STRAIT</b>														
301	223	0	0	0	0	0	0	7,595	0	11,393	0	11,393	18,988	18,988
318	222	0	0	0	3,798	0	3,798	30,380	0	22,785	0	22,785	60,760	60,760
332B	226	351,269	11,867	363,136	306,173	68,830	16,614	2,373	0	2,373	0	2,373	396,364	759,500
334	219	110,128	7,595	117,723	79,748	0	0	0	0	3,798	0	3,798	83,545	201,268
335	220	75,950	0	75,950	75,950	0	3,798	18,988	0	15,190	0	15,190	113,925	189,875
337	221	0	0	0	0	3,798	3,798	15,190	0	7,595	0	7,595	30,380	30,380
353	217	554,958	4,236	559,195	521,068	0	8,473	0	0	0	0	0	529,540	1,088,735
354	218	364,560	26,583	391,143	315,193	0	11,393	49,368	3,798	30,380	0	34,178	410,130	801,273
371	215	111,457	4,458	115,915	106,998	4,458	4,458	22,291	0	0	0	0	138,206	254,121
373A	224	0	0	0	1,849	0	0	0	0	0	0	0	1,849	1,849
373B	225	21,801	21,801	43,601	18,167	0	2,725	57,227	0	6,359	0	6,359	84,478	128,079
393	216	96,036	3,001	99,037	132,049	3,001	0	0	0	0	0	0	135,050	234,087
Population Estimate		1,686,159	79,541	1,765,700	1,560,993	80,087	55,057	203,412	3,798	99,873	0	103,671	2,003,215	3,768,915
Western Section		9,475,995	199,948	9,675,939	9,802,758	499,490	97,912	202,350	73,081	634,959	49,410	757,450	11,359,968	21,035,905
Eastern Section		9,269,377	480,712	9,750,089	9,599,559	903,086	195,843	430,450	40,740	237,846	661	279,247	11,408,177	21,158,264
<b>District Total</b>		18,745,372	680,660	19,426,028	19,402,317	1,402,576	293,755	632,800	113,821	872,805	50,071	1,036,697	22,768,145	42,194,169

Appendix D3.—Tanner crab abundance estimates in the Chignik District by station and sampling locale, 2013.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
<b>IVANOF BAY</b>														
4000	206	146,735	34,937	181,672	180,974	0	0	20,962	0	6,289	0	6,289	208,225	389,897
4007	203	940,234	70,911	1,011,145	1,101,216	7,105	13,132	84,043	0	18,384	0	18,384	1,223,880	2,235,025
4008	207	100,646	41,004	141,650	3,838	0	3,838	353,078	0	399,131	19,189	418,320	779,074	920,724
400X	205	146,909	3,691	150,600	183,871	8,316	492	0	0	492	0	492	193,171	343,771
4024	201	925,025	0	925,025	1,052,668	9,075	5,818	34,907	0	2,909	0	2,909	1,105,376	2,030,402
4036	198	1,029,126	0	1,029,126	1,404,722	0	6,564	9,027	0	12,037	0	12,037	1,432,350	2,461,476
4900	204	540,946	0	540,946	750,810	3,717	0	0	0	0	0	0	754,527	1,295,473
4915	202	61,766	0	61,766	45,752	0	0	2,288	0	2,288	0	2,288	50,328	112,093
Population Estimate		3,891,387	150,543	4,041,930	4,723,851	28,213	29,844	504,305	0	441,530	19,189	460,719	5,746,931	9,788,861
<b>MITROFANIA ISLAND</b>														
4025	200	306,048	3,327	309,375	304,385	0	3,327	1,663	0	3,327	0	3,327	312,701	622,076
4035	197	459,268	0	459,268	535,180	0	0	60,730	0	45,547	0	45,547	641,457	1,100,724
4037	199	60,061	0	60,061	42,043	0	0	38,039	0	20,020	0	20,020	100,102	160,163
4038	327	132,510	0	132,510	150,662	0	1,815	9,076	0	10,891	0	10,891	172,444	304,954
4043	328	36,228	0	36,228	28,983	0	0	3,623	0	0	0	0	32,605	68,833
4048	189	57,479	1,306	58,785	60,745	4,572	653	5,225	653	3,266	1,306	5,225	76,421	135,206
4049	196	473,516	0	473,516	549,482	0	0	5,064	5,064	2,532	7,597	15,193	569,739	1,043,255
4063	188	1,542,093	7,597	1,549,690	1,564,108	150,225	20,206	22,790	5,064	5,064	7,597	17,725	1,775,053	3,324,743
4064	190	75,965	0	75,965	91,158	0	2,532	83,562	0	60,772	0	60,772	238,024	313,989
4065	191	24,807	3,544	28,351	14,175	0	3,544	38,982	0	24,807	0	24,807	81,508	109,859
4066	194	61,538	1,282	62,820	96,153	1,282	0	20,513	0	8,974	0	8,974	126,922	189,741
4067	193	11,538	0	11,538	14,102	1,282	0	14,102	0	7,692	0	7,692	37,179	48,717
4068	192	0	0	0	28,205	0	1,282	8,974	0	6,410	0	6,410	44,871	44,871
4095	195	170,452	0	170,452	204,187	0	0	0	0	0	0	0	204,187	374,639
Population Estimate		3,411,503	17,056	3,428,559	3,683,568	157,361	33,359	312,343	10,781	199,302	16,500	226,583	4,413,213	7,841,770
<b>CHIGNIK BAY</b>														
4256	180	152,849	1,329	154,179	248,546	0	0	0	0	0	0	0	248,546	402,725
4262	181	409,181	9,494	418,674	861,941	28,869	8,248	4,747	0	5,696	0	5,696	909,501	1,328,176
4264	184	682,115	3,344	685,458	901,684	0	0	2,229	0	0	0	0	903,913	1,589,371
4265	182	182,643	0	182,643	176,532	20,944	0	997	0	0	0	0	198,474	381,117
4266	179	431,827	0	431,827	596,912	0	0	0	0	0	0	0	596,912	1,028,740
4267	178	150,001	0	150,001	206,964	949	0	0	0	0	0	0	207,913	357,914
4270	186	886,838	0	886,838	1,382,368	0	0	0	0	947	0	947	1,383,315	2,270,153
4271	185	132,922	11,193	144,115	142,530	1,447	0	3,618	0	5,065	0	5,065	152,660	296,775
4272	176	327,739	4,934	332,673	309,829	12,977	705	705	0	0	0	0	324,215	656,889
4274	177	99,684	949	100,634	150,001	1,899	0	0	0	0	0	0	151,900	252,534

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Appendix D3.—Page 2 of 2.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
4277	175	187,976	5,696	193,673	184,179	2,848	0	4,747	0	10,443	0	10,443	202,217	395,889
4278	173	22,785	7,595	30,380	20,886	949	3,798	35,127	0	31,329	0	31,329	92,089	122,469
4282	174	212,531	19,117	231,647	206,286	29,295	15,868	3,662	0	1,221	0	1,221	256,331	487,979
4286	171	382,915	0	382,915	457,719	2,201	0	0	0	0	0	0	459,919	842,834
4287	172	272,299	0	272,299	333,423	5,824	0	1,456	0	0	0	0	340,703	613,002
4312	187	138,802	971	139,772	143,655	971	1,941	6,794	1,941	17,472	0	19,413	172,774	312,546
4964	183	172,699	0	172,699	240,873	1,142	0	1,142	0	0	0	0	243,156	415,855
Population Estimate		4,845,806	64,622	4,910,427	6,564,328	110,315	30,560	65,224	1,941	72,173	0	74,114	6,844,538	11,754,968
<b>KUJULIK BAY</b>														
4290	169	6,329	0	6,329	4,747	0	0	0	0	0	0	0	4,747	11,076
4296	170	218,736	0	218,736	279,035	32,736	3,118	0	0	0	0	0	314,889	533,625
4298	168	34,876	0	34,876	43,383	0	0	0	0	0	0	0	43,383	78,259
4301	167	127,216	0	127,216	200,318	0	0	0	0	0	0	0	200,318	327,534
4302	166	27,934	931	28,866	50,282	0	0	0	0	0	0	0	50,282	79,147
4308	165	139,558	14,241	153,799	150,001	0	3,798	6,646	0	3,798	0	3,798	164,242	318,041
Population Estimate		554,649	15,172	569,822	727,766	32,736	6,916	6,646	0	3,798	0	3,798	777,861	1,347,682
<b>Chignik District Total</b>		12,703,345	247,393	12,950,738	15,699,513	328,625	100,679	888,518	12,722	716,803	35,689	765,214	17,782,543	30,733,281

Appendix D4.—Tanner crab abundance estimates in the Eastern Aleutian District by station and sampling locale, 2013.

Station	Haul no.	Females			No. Sublegal Males by Size (CW)				Recruit Males	Postrecruit Males (CW)		Legal Males	Total Males	Total Crab
		Juvenile	Adult	Total	<70 mm	70-91 mm	92-114 mm	>114 mm		<165 mm	≥165 mm			
<b>AKUTAN BAY</b>														
AKA	286	9,792	4,896	14,689	7,344	0	0	0	0	0	0	0	7,344	22,033
AKC	287	200,656	3,520	204,176	221,778	19,948	1,173	2,347	0	0	0	0	245,246	449,423
AKD	288	193,154	61,400	254,554	149,020	73,567	94,317	56,590	1,886	13,204	0	15,091	388,585	643,139
AKG	289	12,342	1,899	14,241	7,595	949	9,494	4,747	0	0	0	0	22,785	37,026
AKL	290	1,899	0	1,899	1,899	9,494	24,684	7,595	1,899	0	0	1,899	45,570	47,469
Population Estimate		417,843	71,715	489,559	387,636	103,958	129,668	71,279	3,785	13,204	0	16,990	709,530	1,199,090
<b>UNALASKA BAY/KALEKTA BAY</b>														
KAA	304	8,628	6,471	15,099	10,785	16,177	42,061	4,314	0	0	0	0	73,337	88,436
UNC	308	624,717	15,937	640,653	300,795	124,615	8,594	6,446	0	0	0	0	440,449	1,081,103
UND	302	282,762	40,395	323,156	135,625	63,744	59,675	16,275	1,356	0	0	1,356	276,675	599,831
UNE	307	180,785	622,705	803,490	50,587	9,687	31,213	101,174	5,382	20,450	0	25,832	218,493	1,021,983
UNF	306	15,190	0	15,190	14,241	949	1,899	0	0	0	0	0	17,089	32,279
UNG	305	168,778	3,165	171,942	143,461	9,494	1,055	0	0	0	0	0	154,010	325,952
UNI	301	873	873	1,747	0	873	0	0	0	0	0	0	873	2,620
UNJ	303	14,241	949	15,190	4,747	0	4,747	0	0	0	0	0	9,494	24,684
Population Estimate		1,295,974	690,495	1,986,467	660,241	225,539	149,244	128,209	6,738	20,450	0	27,188	1,190,420	3,176,888
<b>MAKUSHIN BAY</b>														
MKB	294	17,919	270,273	288,191	3,916	25,060	36,807	31,325	2,349	6,265	0	8,614	105,722	393,914
MKC	293	24,470	431,568	456,039	14,737	1,637	25,381	42,575	4,094	18,831	1,637	24,562	108,893	564,931
MKE	292	198,369	9,017	207,386	151,997	0	1,288	9,017	1,288	1,288	1,288	3,864	166,166	373,552
MKF	291	98,058	9,251	107,308	93,432	925	1,850	1,850	925	0	0	925	98,983	206,291
MKJ	299	0	0	0	2,982	0	0	0	0	0	0	0	2,982	2,982
MKK	300	29,912	1,662	31,574	14,956	1,662	0	0	0	0	0	0	16,618	48,192
MKN	298	49,257	27,526	76,784	30,424	0	5,795	21,731	0	5,795	0	5,795	63,745	140,528
MKP	297	21,752	35,347	57,099	2,175	16,858	59,818	25,559	1,631	5,438	0	7,069	111,479	168,579
Population Estimate		439,737	784,644	1,224,381	314,619	46,142	130,939	132,057	10,287	37,617	2,925	50,829	674,588	1,898,969
<b>PUMICESTONE BAY</b>														
PUA	296	29,208	7,038	36,246	19,355	4,575	4,223	704	704	0	0	704	29,560	65,806
PUB	295	31,698	8,768	40,466	14,838	10,117	4,721	1,349	674	0	0	674	31,698	72,165
Population Estimate		60,906	15,806	76,712	34,193	14,692	8,944	2,053	1,378	0	0	1,378	61,258	137,971
<b>Eastern Aleutian District Total</b>		2,214,460	1,562,660	3,777,119	1,396,689	390,331	418,795	333,598	22,188	71,271	2,925	96,385	2,635,796	6,412,918